Plaintiffs' Request for an Order for Google to Show Cause for Why it Should Not Be Sanctioned for Discovery Misconduct

Redacted Version of Document Sought to be Sealed

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23	individually and on behalf of all similarly	ORDER FOR GOOGLE TO SHOW
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24		BE SANCTIONED FOR DISCOVERY
25	Plaintiffs,	MISCONDUCT
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26	VS.	Referral: The Honorable Susan van Keulen
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27	GOOGLE LLC,	
28	Defendant.	
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REQUEST FOR AN ORDER TO SHOW CAUSE

TO ALL PARTIES AND THEIR ATTORNEYS OF RECORD:

The undersigned respectfully asks the Honorable Susan van Keulen of the United States District Court for the Northern District of California to issue an order for Google, LLC ("Google") to show cause for why it should not be sanctioned for discovery misconduct. This Request is based on the attached Memorandum of Points and Authorities, the Declaration of Mark C. Mao and exhibits attached thereto, the pleadings and other papers on file in this action, any oral argument, and any other evidence that the Court may consider.

ISSUE PRESENTED

Whether the Court should order Google to show cause for why it should not be sanctioned for discovery misconduct for (1) concealing its logging of a "maybe_chrome_incognito" to detect, monitor, and analyze Chrome Incognito traffic from putative class members, from Plaintiffs, the Special Master, and the Court; and (2) violating the Court's November 12, 2021 Order.

RELIEF REQUESTED

Pursuant to this Request, and Plaintiffs' October 14, 2021 Rule 37(b) Motion, Plaintiffs respectfully ask the Court to set an evidentiary hearing and order Google to show cause for why it should not be sanctioned for discovery misconduct, including by:

- 1. Taking as established for purposes of the action that (A) Google can detect event-level Incognito traffic within its logs, (B) this Incognito data is linkable to users, so that (C) the class is ascertainable.
- 2. Instructing the jury that "Google concealed and altered evidence regarding its ability to identify Incognito traffic."
- 3. Requiring Google to reimburse Plaintiffs for all fees that have been paid and will be paid to Special Master Brush.

Plaintiffs also ask that the Court order Google employees Chris Liao and Bert Leung to appear at the evidentiary hearing, as well as the Google declarant who swore to the Court that Google complied with the November 12 Order (Dkt. 338).

1	Dated: February 26, 2022	BOIES SCHILLER FLEXNER LLP
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INTRODUCTION

On September 2, 2020, Google told the Court that "it is unclear how Plaintiffs could ascertain the members of the proposed class" (including people who used Chrome Incognito). Dkt. 59 at 8. Ever since, Google has concealed from Plaintiffs, the Court, and the Special Master that Google implemented a tool to do just that for its own business purposes. Google produced 283 of Bert Leung's documents on Friday, February 18, 2022—two weeks before the close of discovery and months into the Special Master process. Those documents' revelations are stunning:

- Since June 2020, Mr. Leung and Mandy Liu have worked on a project to

 Ex. 1 GOOGBRWN-00845639 at -40;
- As part of that effort, Mr. Leung suggested in June 2020 (id.), and he and Ms. Liu decided to call this field a "maybe_chrome_incognito" bit in October 2020 (after this case was filed). Ex. 2, GOOG-BRWN-00845596;
- Google actually began logging the proposed "maybe chrome incognito"

Ex. 3, GOOG-BRWN-00845423.

As part of the Special Master process to provide "Plaintiffs the tools to identify class members using Google's data," the Court ordered Google to submit a sworn declaration that "to the best of its knowledge, Google has provided a complete list of data sources that contain information relevant to Plaintiffs' claims." Dkt. 331, Ex. 1 ¶ 1. On November 18, 2021, Google falsely certified that it had done so—when, in fact, it failed to disclose logs that apparently contain the "maybe_chrome_incognito" field. Compare Dkt. 338-1 (list of data sources disclosed by Google), with Ex. 3, GOOG-BRWN-00845423. And for a log Google did disclose, Google altered evidence by deleting the "maybe_chrome_incognito" field from the schema before producing it to the Special Master and Plaintiffs. As a result, Plaintiffs and the Special Master had no idea the "maybe_chrome_incognito" field existed.

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This was the culmination of Google's concealment, not its inception. To throw Plaintiffs off the scent from the very start, Google failed to disclose Bert Leung and Mandy Liu in a list of 200+ persons with knowledge and potential document custodians Google provided Plaintiffs on February 4, 2021. Ex. 4, GOOG-BRWN-00023909. Google again failed to disclose Mr. Leung or Ms. Liu in its March 29, 2021, response to Plaintiffs' Interrogatory asking Google to identify employees with knowledge about "Google's collection and use of data in connection with users' activity while in a private browsing mode." Exs. 5, 6. These omissions were inexcusable, given that (a) Mr. Leung and Ms. Liu had already been working on their project to detect Incognito since mid-2020 and (b) Google's counsel have been directly communicating with Mr. Leung about this case since at least February 1, 2021 (before Google produced its list of potential custodians). See Ex. 7.

Without Mr. Leung's or Ms. Liu's documents, Plaintiffs were missing critically important information concerning Google's logging of the "maybe chrome incognito" field. In December 2021, Plaintiffs deposed Mr. Leung's supervisor Chris Liao—and asked him about Google's efforts to study whether Incognito could be detected. Mr. Liao falsely testified that any Google project to detect Chrome Incognito had been abandoned and Google did not "go on to build any dedicated signals afterwards either." Ex. 8, Liao Tr. 134:7-10. Google did not correct those false statements, either informally or through Mr. Liao's January 6, 2022, errata to his deposition transcript.

But Google not only deceived Plaintiffs—it deceived the Court and the Court's appointed Special Master. During the entire period that Google was concealing Mr. Leung's development and implementation of the "maybe chrome incognito" bit, Google made multiple misleading statements to the Court and the Special Master concerning its ability to detect Incognito, its data production, and the supposed "burdens" it claims to have faced throughout the discovery process.

And Google almost got away with it. But for this Court's recent ruling on Plaintiffs' motion to compel documents from Mr. Leung, Google might have crossed the discovery finish line before their misconduct caught up to them. That document production made just two weeks before the close of discovery revealed, for the first time, that Mr. Leung did not just analyze Incognito detection (as a handful of previously produced documents had implied). In fact, Mr. Leung figured it out, developing and implementing a "maybe_chrome_incognito" detection tool within specific Google logs. These belatedly produced documents led to an avalanche of further discoveries in the past week, confirming the lengths to which Google went to conceal the "maybe_chrome_incognito" field from Plaintiffs, the Special Master, and the Court.

Google's actions simply cannot be reconciled with its obligations to conduct discovery in good faith, tell the truth under oath, and comply with Court orders. Google's conduct cannot be chalked up to a mere discovery dispute. Without appropriate sanctions—ones with teeth—Google has not been, and will not be, deterred. Google's attitude appears to be that it has nothing to lose and everything to gain: Absent real sanctions, it can hide the ball and either (a) get away with it or (b) when caught, simply produce what it should have provided earlier. And monetary sanctions, while certainly warranted, do not suffice. Google generates hundreds of billions of dollars in revenue per year and monetary sanctions are simply immaterial to Google's bottom line. Moreover, discovery is coming to a close and Plaintiffs have been prejudiced, having taken numerous depositions and engaged in a many-months-long Special Master process, all while Google withheld the truth and plainly relevant data in violation of a Court order.

Plaintiffs respectfully ask the Court to reinstate Plaintiffs' October 14, 2021, Rule 37(b) Motion and order Google to show cause why it should not be sanctioned in connection with that motion and this one. Appropriate sanctions may include but are not limited to:

- 1. Taking as established for purposes of the action that (A) Google can detect event-level Incognito traffic within its logs, (B) this Incognito data is linkable to users, so that (C) the class is ascertainable.
- 2. Instructing the jury that "Google concealed and altered evidence regarding its ability to identify Incognito traffic."
- 3. Requiring Google to reimburse Plaintiffs for all fees that have been paid and will be paid to Special Master Brush.

Plaintiffs also submit that an evidentiary hearing is warranted to hear testimony from (1) Mr. Leung (whose deposition Google unilaterally rescheduled to the last day of fact discovery, after Plaintiffs began raising questions concerning the content of his recently-produced documents); (2) Mr. Liao (who gave false testimony concerning Google's Incognito detection); and (3) Google's Court-ordered declarant (who it appears falsely certified that Google had complied with the Court's order to provide a "complete list of data sources that contain information relevant to Plaintiffs' claims").

BACKGROUND

- I. Plaintiffs Uncover the Scope of Google's Misconduct
 - A. Two Weeks Before the Close of Fact Discovery, Plaintiffs Learn that Google Implemented an Incognito Detection Tool Within Google Logs.

On September 2, 2020, Google told the Court that "it is unclear how Plaintiffs could ascertain the members of the proposed class" (i.e., people who used a private browsing mode, including Chrome Incognito). Dkt. 59 at 8. Since then, Plaintiffs have diligently sought discovery to refute Google's assertion.

Eighteen months later, in a February 18, 2022 production, following Plaintiffs' motion to compel documents from Bert Leung (see Dkt. 401), Plaintiffs for the first time learned that internal Google logs and data sources now contain a field dedicated to identifying and tracking Incognito traffic. The name of the field is "maybe-chrome-incognito":

Bert Leung, 2021-09-13 14:58:47
are we already logging maybe-chrome-incognito in search
Mandy Liu, 2021-09-13 14:58:54
yes

Ex. 9, GOOG-BRWN-00845312 at -18. Prior to this production, Mr. Leung's supervisor, Chris Liao, testified that projects to identify and track Incognito traffic had been discontinued for alleged lack of accuracy. Ex. 8, Liao Tr. 134:7-10. ("We did not, to my best knowledge, go on to build any dedicated signals afterwards either.").

Documents from Google's February 18 production show that in 2021 Mr. Leung and Ms. Liu finalized and implemented an Incognito-detection tool for both Google "Search" logs (as noted in the above document) as well as "Display" logs, i.e., logs that store data about users' visits to non-Google websites. Ex. 10, GOOG-BRWN-00845569 at -69. Because Google had represented in the Liao deposition that such projects had been abandoned, Plaintiffs had no idea that Google implemented this Incognito-detection tool until Google produced documents for the first time just two weeks before the upcoming March 4 close of fact discovery.

Google developed this "maybe_chrome_incognito" tool by relying on something called the "X-Client Data Header." The absence of the "X-Client Data Header" is the "proxy" for detecting Incognito traffic within these logs. Ex. 11, GOOG-BRWN-00845277. Notably, Google has consistently represented to Plaintiffs, the Special Master, and the Court that the absence of the X-Client Data Header cannot be used to detect Incognito use. *E.g.*, Dkt. 140 at 5, Dkt. 218 at 6.

While Google was repeatedly representing to this Court that private browsing users cannot be identified, Mr. Leung and Ms. Liu were in fact developing (and eventually implemented) a tool designed to do precisely that—detect Incognito traffic within Google logs. Apparently, Google needed such tools so that it can measure and attempt to

as a result of a new feature for its Incognito mode that blocks third-party cookies, in addition to a stronger pro-privacy environment that disfavors third-party cookies. Ex. 12, GOOG-CABR-05144884 at -933. In essence, when a business purpose arises, Google can readily develop tools to detect Incognito traffic, but when it comes to this litigation, Google tells the Court it cannot be done.

B. Google Admits That It Removed This Incognito Detection Field from a Log Produced to Special Master Brush, and that Google Withheld Other Logs With the Incognito Detection Field

As discovery progressed, Google graduated from concealing evidence to altering evidence.

After finally learning that Google had implemented Mr. Leung's and Ms. Liu's
"maybe_chrome_incognito" detection tool within specific logs, Plaintiffs promptly asked Google

to clarify whether all such logs had already been identified and produced within the Special Master process, in accordance with this Court's November 12 Order, Dkt. 331.

During a February 23, 2022, meet-and-confer supervised by Special Master Brush, counsel for Google admitted that Google had only produced schema for log while withholding other logs entirely. Mao Decl. ¶ 26. And later that night, counsel admitted that the "maybe_chrome_incognito" field had been entirely removed from this schema prior to its production. Ex. 20. Let us be clear: prior to producing this log to Plaintiffs, Google removed from it all traces of a field dedicated to detecting Incognito traffic, a field which could identify class members. Google poisoned the Special Master process from the start.

Google claims that it did not include this critical Incognito detection within the schema produced because this field may not fall within "the largest 100 fields" of a given log—an absurd position. The Court's November 12 Order required that Google identify *all* relevant logs and produce *all* schema and fields, and Google and its counsel understood the purpose of this entire process. There was and is no excuse for removing a field named "incognito." To the extent Google decided it was necessary to cull the information for some reason (even though this would be contrary to the November 12 Order), surely Google realized that "*maybe_chrome_incognito*" should not have been among the withheld fields.

Furthermore, Plaintiffs still have barely any insight into what *other* logs contain the Incognito detection field that *still* have not been disclosed. On Friday, February 18, 2022, Google produced for the first time a May 18, 2021 document approving logging the "maybe_chrome_incognito" bit in certain logs (and stating there were logs not listed). Ex. 3, GOOG-BRWN-00845423 at -24. Many of the listed logs do not appear to have been included in Google's Court-ordered declaration that it had identified all relevant sources. Dkt. 338-1. During the February 23 meet-and-confer, Google refused to clarify how many other logs contain this field. Mao Decl. ¶ 26. Plaintiffs repeatedly asked but, rather than answer, Google told Plaintiffs to ask Mr. Leung during his upcoming deposition. *Id.* But while Mr. Leung's deposition had been

scheduled for February 25 pursuant to written agreement by the parties, as soon as Plaintiffs began asking questions arising from Mr. Leung's documents, Google unilaterally and without explanation re-set the deposition for March 4, the last day of discovery. Mao Decl. ¶ 25. Google claimed it was necessary to reschedule Mr. Leung's February 25, 2021 deposition because he had a sudden "conflict" arise—but then refused to say what the supposed conflict was in response to multiple demands from Plaintiffs. Id.

Google's misconduct has undermined the Special Master process. Had the schema for the log with the Incognito field been produced without any alteration, Plaintiffs would have discovered the Incognito detection field months ago. Plaintiffs did not even choose this log for Iterative Search 1 because Plaintiffs had no idea that Google had actually implemented an Incognito detection field. Moreover, Plaintiffs and the Special Master would have had sufficient time to navigate the identification and production of all such logs (assuming arguendo that Google not only provided the field, but the other logs that also contain this field as well). Instead, discovery is about to close and Plaintiffs do not have a single log entry of their data that includes the Incognito detection field.

18 Months of Obstruction II.

In Late 2020, Google Claims that It Has No Documents to Help Identify Class Α. Members; Meanwhile Bert Leung Has Already Begun Working to Detect **Incognito Traffic Within Google Logs**

The above lays out where Google's concealment ended. But it is also important to understand just how far back it began. Google's deception began on September 30, 2020, after Plaintiffs served RFP 10, seeking, "Documents sufficient to identify all alleged class members, including all electronic or physical address information associated with alleged class members." Ex. 13 at 13. Google refused to produce any documents, claiming that "Google does not maintain documents or data in the ordinary course of business that would allow it to 'identify all alleged class members" and that the "identity of 'alleged class members' . . . is not ascertainable." *Id.*

Yet three months earlier, in June 2020, Mr. Leung had already begun working on the culminate in the development and project that would implementation

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1	"maybe_chrome_incognito" field. On June 9, 2020 (a week after this case was filed), Mr. Leun
2	submitted a proposal about his idea to
3	Ex. 1, GOOG-BRWN-0084563
4	at -40. This project was important because Google had recently begun
5	
6	See Ex. 14, GOOG-CABR
7	04324934 at -35 (discussing project
8); see also Dkt. 395 at 13-14, 16-1
9	(summarizing this financial analysis). Within his June 9 proposal, Mr. Leung flagged the "potential
10	privacy risk of logging inferred Chrome Incognito detection," and Mr. Leung sought "feedback
11	from privacy gurus" about his concern. Ex. 1. In October, after this lawsuit was filed, Mr. Leun
12	and Ms. Liu named their tool: "maybe_chrome_incognito." Ex. 2. GOOG-BRWN-00845596.
13	Google did not provide any information about these efforts to Plaintiffs at that time.
14	B. In 2021, Google Hides Mr. Leung and His Significant Progress from Plaintiff and the Court
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15 16	and the Court
15 16 17	and the Court Plaintiffs persisted in seeking discovery for purposes of class identification. To identif
15 16 17 18	and the Court Plaintiffs persisted in seeking discovery for purposes of class identification. To identif document custodians, Plaintiffs asked for a list of employees with information about the case
15 16 17 18 19	and the Court Plaintiffs persisted in seeking discovery for purposes of class identification. To identify document custodians, Plaintiffs asked for a list of employees with information about the case Google provided that list on February 4, 2021, and it included over 200 employees. Ex. 4, GOOG
15 16 17 18 19 20	and the Court Plaintiffs persisted in seeking discovery for purposes of class identification. To identify document custodians, Plaintiffs asked for a list of employees with information about the case Google provided that list on February 4, 2021, and it included over 200 employees. Ex. 4, GOOG BRWN-00023909. <i>The list did not include Mr. Leung or Ms. Liu</i> , who had already set out on
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1	Plaintiffs also sought to address deficiencies with Google's preservation efforts. On March
2	23, the parties filed a joint letter brief regarding Google's refusal to suspend its routine deletion
3	periods for any logs. Dkt. 119. Google told the Court that Plaintiffs' demand would require Google
4	to preserve any log in which private browsing data might have been stored, and on that basis
5	characterized "Plaintiffs' preservation demand [a]s extraordinarily burdensome [and] not
6	feasible." Dkt. 119 at 3. Ultimately, "[b]ased upon the facts currently before the Court" and
7	"without prejudice to Plaintiffs' ability to raise a challenge based upon new evidence not currently
8	before the Court," this Court granted Google a Protective Order. Calhoun v. Google, 5:20-cv-
9	05146 (N.D. Cal.) at Dkt. 174 (adopted by reference in Dkt. 147-1 at 1). Plaintiffs briefed this
10	preservation dispute, and this Court issued a ruling, without knowing about the progress that Mr.
11	Leung and Ms. Liu were making in their efforts to detect, log, and preserve Incognito traffic.
12	For example, on April 14, two weeks before this Court's ruling, Mr. Leung and Ms. Liu
13	sought advice from colleagues regarding their efforts. Ms. Liu wrote:
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16	E 15 COOC PRINT 00045477 + 77
17	Ex. 15, GOOG-BRWN-00845477 at -77.
18	Ex. 16, GOOG-BRWN-00845481,
19	at -81. Ms. Liu replied:
20	Ex. 15.
21	By contrast, Google in this case never proposed to
22	Id.
23	Nor did Google disclose to Plaintiffs that Mr. Leung and Ms.
24	Liu were developing a "maybe_chrome_incognito" detection tool for particular logs. Had Google
25	done so, the parties could have easily reached a compromise in which Google would preserve a
26	far more limited set of data, namely, only the necessary parts of the particular logs in which the
27	"maybe_chrome_incognito" field would live.
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1	Google's obstruction likewise infected the parties' dispute over RFP 10, which sough		
2	"Documents sufficient to identify all alleged class members." In their April 23, 2021 motion to		
3	compel, Plaintiffs, as a compromise, proposed focusing on data from logs containing the "X		
1	Client-Data Header" field, and, specifically, data where this "X-Client Data Header" is missing:		
5 6 7	At the 30(b)(6) deposition in this case, Google's representative confirmed that when a user is engaged in Incognito mode, the "X-Client Data header" is not sent to Google Google also admits that it maintains raw referrer header logs containing X-Client Data Header fields. Class members may be ascertained by looking for entries without the X Client Data header.		
3	Dkt. 140 at 4 (emphasis added). Plaintiffs thus proposed doing what Bert Leung wa		
)	simultaneously doing, as Mr. Leung's "maybe_chrome_incognito" bit is logged when the X-Clien		
10	Data Header is absent (and certain other criteria are also satisfied). See Ex. 11.		
11	In opposition, Google told the Court that Plaintiffs' proposal was "unworkable" since "the		
12	absence of the header cannot be used to ascertain purported class members as it would improperly		
13	include all users browsing on a non-Chrome browser." Dkt. 140 at 5. And during the ensuing		
14	April 29 discovery hearing, counsel for Google doubled down on those assertions, going so far a		
15	to accuse Plaintiffs' counsel of "speculation":		
16 17 18	• [W]e felt like there's quite a lot of speculation on behalf of [Plaintiffs' counsel] and we wanted to explain to you that this is actually not something that we just have o can quickly query, nor do we think their proposed path is one that will lead to tha outcome. Apr. 29 Tr. at 20:1-6.		
19 20	• [W]e do not have the information to identify the plaintiffs' private browsing sessions. I know [Plaintiffs' counsel] doesn't like that, but that is the reality. Apr 29 Tr. at 24:1-13.		
21	As with the preservation dispute, Google did not inform Plaintiffs (or the Court) about Mr. Leung'		
22	and Ms. Liu's efforts.		
23	The Court rejected Google's arguments, holding that Plaintiffs were entitled to		
24	test Google's say-so about the data through discovery:		
25	Well, but what the Plaintiffs are asking for is pieces of information from different places because they want to see if they can piece together, by		
26	combination of that information, class members. And that's why – I mean,		
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it seems to me that they have a right to try to do that with whatever information you have.

Apr. 29 Tr. at 19:2-7 (emphasis added). The Court then ordered Google to produce all "authenticated" and "unauthenticated" data relating to the named Plaintiffs. Dkt 147-1 at 2.

Meanwhile, Mr. Leung and Ms. Liu continued making significant progress. In a May 10, 2021 conversation (produced for the first time on February 18, 2022), Mr. Leung told Ms. Liu that the "maybe_chrome_incognito" detection tool is "sensitive"—"not from a privacy perspective, but from a legal (competition) perspective." Ex. 17, GOOG-BRWN-00845437. By that point, Google was apparently no longer concerned that tracking Incognito within its logs raised any "privacy" concerns. Google was instead worried about the "legal" implications, i.e., for lawsuits like this one. Yet Google still did not disclose Mr. Leung or Ms. Liu or their work to Plaintiffs.

In July 2021, Plaintiffs moved to compel responses to RFP 120, which sought "[d]ocuments sufficient to identify, during the Class Period, Chrome web browser communications that did not contain any X-Client-Data-Header." Dkt. 218 at 3. Plaintiffs sought this information to "identify class members and determine what data Google collected (and continues to collect) from their private browsing activities, using the empty X-Client-Data header field as the starting point." *Id.* In opposition, Google complained that producing the information sought would be "burdensome and not proportional because Google would have to produce records (including confidential business information related to fields collected) that have nothing to do with the claims at issue here." *Id.* at 9.

Once again, Google did not inform the Court or Plaintiffs that Google was already (or at least on the cusp of) implementing the "maybe_chrome_incognito" detection field within specific Google logs and that the absence of the X-Client-Data Header was one of the criteria for logging that field.

¹ Part of the document is not visible because of how Google produced it. Plaintiffs used the metadata to complete this quote.

Had Google been forthcoming, the parties could have reached a compromise where Google would only produce data from the specific logs that contain "maybe chrome incognito" detection tool. Google instead once again misrepresented its burden, pretending that it would need to produce every piece of data that lacked an X-Client Data Header. Because of Google's misrepresentations, Plaintiffs' motion was denied (after being referred to the Special Master). See Dkt. 331.

C. Google Undermines the Special Master Process

Google's misconduct culminated in its violation of the Court's orders governing the Special Master process. In October 2021, Plaintiffs filed a Rule 37(b) motion because Google was withholding data on the basis of its say-so about the data's relevance. *See* Dkt. 292 at 6-12 (summarizing the data that Google was refusing to produce). In their motion, Plaintiffs asked the Court to order Google to comply with the April 30 Order or, alternatively, prohibit Google from making arguments about any data it refused to produce. *Id.* at 15-19. Special Master Brush informed the Court of his plan to issue a Report and Recommendation regarding certain disputes, and the Court stayed further briefing on Plaintiffs' Rule 37(b) motion "pending resolution of the issues set forth in the forthcoming Report and Recommendation." Dkt. 297.

Special Master Brush's Report validated Plaintiffs' concerns. He found as "fact" that the named Plaintiffs' data has "not yet been fully produced." Dkt. 299 ¶ 53. And this Court, on *de novo* review, upheld his factual finding:

[T]he Court finds that the Special Master's factual conclusions regarding the deficiencies in Google's production of information about searches conducted to date as well as production of Plaintiffs and putative class data . . . are well founded and adopts those findings. As previously noted by this Court, Google knows what data it has collected regarding Plaintiffs and putative class members and where the data may be found, therefore Google must produce the information and data as directed herein.

Dkt. 331 at 3.

To remedy the problem, Google was ordered to conduct an additional four rounds of iterative searches for the named Plaintiffs' data—in effect, Google got another chance to play by the rules. Plaintiffs would select from among data sources that Google had already identified and

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then propose search strings, and Google would produce the data that hit on those strings. Dt. 331, Ex. 1. The Court also found that any burden concerns were Google's own fault:

To the extent [this process] requires the significant commitment of time, effort, and resources across groups of engineers at Google on very short timelines, that burden . . . arises, at least in part, as a result of Google's reticence thus far to provide critical data source information in these actions.

Id. at 4-5.

To address Plaintiffs' concern about Google's failure to identify necessary logs, Google was also required to "provide a declaration, under penalty of perjury from Google, not counsel, that . . . [t]o the best of its knowledge, Google has provided a complete list of data sources that contain information relevant to Plaintiffs' claims." *Id.* Ex. 1 ¶ 1. A Google Discovery Manager provided that declaration on November 18, swearing that "To the best of my knowledge and informed understanding, Google has provided a complete list of sources that contain information about Plaintiffs relevant to Plaintiffs' claims." Dkt. 338. ¶ 3.

This statement, in light of Mr. Leung's recently produced documents, appears to be false. Documents Google produced on February 18, 2022 appear to demonstrate that "maybe_chrome_incognito" was approved for use in multiple logs that had not been disclosed in Google's Court-ordered declaration. Ex. 3, GOOG-BRWN-00845423. Moreover, even for the logs that Google did disclose, Google did not reveal to Plaintiffs or the Special Master that they contained a "maybe_chrome_incognito" field. Worse yet, for the only log schema Plaintiffs received that actually contains this field, Google removed any trace of the field prior to its production. And Google still hasn't told Plaintiffs which other logs contain this field that have not yet been identified and produced. Mao Decl. ¶ 26. Google likewise removed the schema the fields that Mr. Leung and Ms. Liu were using in conjunction with the "maybe_chrome_incognito" field. Id.; see also Ex. 3, GOOG-BRWN-00845423.

Google's obstruction has made a mockery of the whole Special Master process. In the Court's words, this process was intended to, among other things, "provide the Brown... Plaintiffs the tools to identify class members using Google's data." Dkt. 331 at 4 (emphasis added). Yet

Google is still withholding from Plaintiffs the precise logs and fields that Google itself has been using to identify Incognito traffic during the discovery period. Google has wasted the Court's time, the Special Master's time, and Plaintiffs' time.

D. With the Court's Help, Plaintiffs Finally Discover the Truth

On Thanksgiving Eve 2021 (long after Google's early October document production deadline), Google produced a document that finally set Plaintiffs on the path to uncovering Google's misconduct. The document was a July 2020 email from Bert Leung discussing a

Ex. 18, GOOG-CABR-05280756. Plaintiffs now understand this July 2020 as the beginning of Mr. Leung's efforts to build the "maybe chrome incognito" field.

Plaintiffs were alarmed to realize that one of logs that Mr. Leung was studying, the had not yet been disclosed. Plaintiffs promptly brought this missing log to the Special Master, and after reviewing the documents, he directed Google to produce the log schema for the log and to run searches of the log. Mao Decl. ¶ 28. Special Master Brush thus overruled Google's objection that the log was irrelevant insofar as it was a "Search" log. From that point forward, Google was indisputably on notice that it could not withhold logs on the basis of the log being a "Search" log, particularly any log that Mr. Leung studied for his analysis, let alone a log in which Mr. Leung actually implemented the Incognito detection field.

Google has since then refused to tell Plaintiffs which other logs Mr. Leung evaluated in the early stages of his "log analysis of Chrome Incognito." After Special Master Brush overruled Google's objection on the Plaintiffs asked Google whether any other logs that Mr. Leung studied had been withheld. Mao Decl. ¶ 29. Counsel for Google never responded to Plaintiffs' multiple requests. *Id*.

Plaintiffs then propounded an interrogatory asking Google to "identify *every* log and data source that Google reviewed, analyzed, or searched as part of Google's efforts to conduct a 'log analysis of Chrome Incognito' in and around mid-2020. *See, e.g.*, GOOG-CABR-05280756," Ex.

19 (emphasis added). Google did not answer that question, either. Google instead evaded it by merely quoting back *one* of the logs that was already mentioned in the email that Plaintiffs cited. See id. ("Google used in the analysis of Ad Manager browsing traffic described in GOOG-CABR-05280756."). That evasion is improper. Google has subsequently clarified in meet-and-confers that Mr. Leung's analysis was not limited to the logs mentioned in this one document, and yet Plaintiffs still do not have a complete list of every data source that Mr. Leung studied, much less a complete list of the logs in which "maybe_chrome_incognito" field has officially been implemented. Mao Decl. ¶ 30.

The Thanksgiving Eve production also clarified for Plaintiffs that Mr. Leung was an important witness for this case, so Plaintiffs asked Google to produce custodial documents from his files. Google objected, principally contending that Plaintiffs could not show "good cause" to add another custodian above the limit the Court had previously set. Dkt. 399 (joint letter brief). Plaintiffs countered by arguing that Google had never disclosed Mr. Leung as a potential custodian with relevant information and likewise delayed in producing documents about his role in the Incognito detection analysis. *Id*.

Meanwhile, on December 2, Chris Liao, Mr. Leung's immediate supervisor, testified that Google had abandoned any efforts to identify Incognito traffic within its logs. Plaintiffs asked Mr. Liao whether "amongst these privacy signals, is there one for incognito mode browsing on Chrome?" Ex. 8, Liao Tr. 131:14-16. Mr. Liao answered, "No." *Id.* He went on to elaborate for minutes, never once mentioning the creation and implementation of the "maybe_chrome_incognito" field, which had been introduced in certain logs by no later than September. Ex. 9, GOOG-BRWN-00845312 at -18.

- [T]here was discussion around proxy signals that we can sue to approximate incognito traffic. However, we were not able to identify any definitive or reliable signal to identify incognito mode in the end. Ex. 8, Liao Tr. 133:23-134:3.
- [I]t was determined that there was no reliable way to technically detect incognito in a definitive and reliable and accurate manner. And as a result, *no further action was taken to build such a hypothetical signal*. *Id.* 134:15-20 (emphasis added).

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• As I stated before, we do not have a reliable *signal to infer incognito* mode at this time we receive an ad query. *Id.* 140:6-10 (emphasis added).

These statements were misleading, at best. Google had already implemented a specific field within Google logs to detect Incognito. Whether Mr. Liao would now contend that signal is 100% accurate is of no moment. Google deemed the signal accurate enough to roll it out for its own use, and Plaintiffs are entitled to this discovery.

Google might have gotten away with concealing critical evidence but for this Court's ruling on the Bert Leung document dispute. The Court agreed with Plaintiffs, ordering Google to provide hit counts for the search terms that Plaintiffs requested and to then meet-and-confer to resolve the dispute. Dkt. 401. It turns out that Plaintiffs' proposal hit on just 982 documents, and Google shortly thereafter made a production from Mr. Leung's custodial files. Mao Decl. ¶ 5. That February 18, 2022 production revealed to Plaintiffs, for the first time, that Google had actually implemented a field within particular logs called "maybe-chrome-incognito." Ex. 9, GOOG-BRWN-00845312 at -18 (Leung: "are we already logging maybe-chrome-incognito in search already?" Liu: "yes"). And days later, Plaintiffs learned, again for the first time, that (a) Google had removed this field from a log schema produced to Plaintiffs and (b) continued to withhold in their entirety *other* logs with the field. In light of all of these revelations, Plaintiffs are seeking additional discovery from Google relating to this field. See Dkt. 424 at P22.

But regardless of whether Plaintiffs obtain additional discovery, Google's persistent efforts over 18 months to obstruct discovery and conceal its implementation of an Incognito detection tool should not be countenanced. Google must be held accountable for its misconduct.

² Google might point out in opposition that it produced a tiny number of documents alluding to the possibility of developing a "maybe_chrome_incognito" field prior to the February 18, 2022 production. *See generally* Mao Decl. (summarizing the earlier productions). None of those documents showed that Google actually implemented the field in Google logs; they at most reflected the idea of creating such a field. And Plaintiffs had no reason to believe this field had been actually implemented, particularly when Google (1) removed the field from a log schema it produced, and (2) a Google witness testified that Google did not in fact implement any Incognito detection signal.

ARGUMENT

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Legal Standard

Under Rule 37(b)(2)(A), when a party fails to comply with a discovery order, a court may impose "whatever sanctions are just . . . up to dismissal of part or all of the party's claims." Sanchez v. Rodriguez, 298 F.R.D. 460, 463 (C.D. Cal. 2014). Such remedies may include but are not limited to establishing facts in favor of the moving party, prohibiting the party in violation from supporting designated claims or introducing designated matters in evidence, imposing monetary sanctions in the form of reasonable expenses caused by the failure to obey, treating this failure as contempt and staying the proceedings until the order is obeyed. See Fed. R. Civ. P. 37(b)(2). In the context of Rule 37(b) sanctions, the court reads the term "order" in Rule 37(a) "broadly." Sali v. Corona Reg'l Med. Ctr., 884 F.3d 1218, 1222 (9th Cir. 2018). A "district court has great latitude in imposing sanctions for discovery abuse." Dahl v. City of Huntington Beach, 84 F.3d 363, 367 (9th Cir. 1996).

In addition, "discovery misconduct may be punished under the court's 'inherent powers' to manage its affairs." Guifu Li v. A Perfect Day Franchise, Inc, 281 F.R.D. 373, 396 (N.D. Cal. 2012) (quoting Unigard Sec. Ins. Co. v. Lakewood Eng. Mfg. Corp., 982 F.2d 363, 368 (9th Cir. 1992)); see also Fink v. Gomez, 239 F.3d 989, 994 (9th Cir. 2001) (district courts have inherent power to levy sanctions for "bad faith or conduct tantamount to bad faith," including recklessness combined with "frivolousness, harassment, or an improper purpose.").

II. Google Violated the November 12 Order, and Abused the Discovery Process Throughout this Case

Google violated the November 12 Order by (1) withholding the "maybe chrome incognito" field from Plaintiffs, and (2) representing to the Court that it had identified all relevant sources to Plaintiffs. The November 12 Order required Google to "provide a declaration, under penalty of perjury from Google, not counsel, that . . . [t]o the best of its knowledge, Google has provided a complete list of data sources that contain information relevant to Plaintiffs' claims." *Id.* Ex. $1 \ \P$ 1. A Google Discovery Manager provided that declaration on November 18. Dkt. 338. \P 3.

In fact, Google altered one of the log schemas it produced to Plaintiffs by removing the "maybe_chrome_incognito" field from the log, and Google continues to withhold a still-unspecified number of other logs that contain this same Incognito detection field, including logs that contain so-called "unauthenticated" data. There is no excuse for these plain-as-day violations of this Court's order, particularly when Google knows that the purpose of this process is to "provide the Brown . . . Plaintiffs the tools to identify class members using Google's data." Dkt. 331 at 4 (emphasis added).

Plaintiffs expect Google to argue that some of the withheld logs did not have to be produced because those logs contain "Search" data or "authenticated" data. But the whole point of the Special Master process is to "provide the *Brown*... Plaintiffs the tools to identify class members using Google's data." Dkt. 331 at 4. Search data is obviously such a tool. As explained in Plaintiffs' portion of the 30(b)(6) letter brief, people run Google searches to visit non-Google websites. Dkt. 411 at 2. Therefore, the Court ordered Google to produce a witness to testify about "Google's ability to identify users or devices based on their Google searches within a private browsing mode." Dkt. 418-1 at 26. In any event, Google has also refused to confirm whether it withheld any logs with this field that are specific to so-called "unauthenticated" data. Mao Decl. ¶ 26. If Google has produced all "unauthenticated" data logs that contain the Incognito detection tool, then surely Google would confirm as much. At bottom, in a case where Google has been disputing Plaintiffs' ability to identify class members, there is simply no excuse for Google withhold from Plaintiffs logs that contain the "maybe_chrome_incognito" field.

As a result of Google's violations, with just one week left before the close of fact discovery, Plaintiffs still lack a single piece of data associated with the "maybe_chrome_incognito" field. The Court and Special Master could not have envisioned this outcome.

But the misconduct here goes beyond violating one or two Court Orders. Google has made a mockery of the entire course of discovery. To recap:

- Google omitted Mr. Leung and Ms. Liu from a list of over 200 employees with relevant information and likewise omitted them from an interrogatory response.
- Google briefed and prevailed in many discovery disputes, including over ESI preservation, by misrepresenting the burden associated with Plaintiffs' requests. Google could have simply followed Mr. Leung's lead and produced and preserved a tiny fraction of its data—only the data used for the "maybe_chrome_incognito" field.
- A Google witness testified that any projects to identify and track Incognito traffic had been discontinued for alleged lack of accuracy. Ex. 8, Liao Tr. 134:7-10.

III. Google Should Be Sanctioned

To remedy the severe prejudice caused by Google's misconduct, Plaintiffs respectfully seek: (A) evidentiary sanctions and jury instructions related to Google's concealment of the "maybe_chrome_incognito" field; and (B) reimbursement by Google for all fees paid by Plaintiffs' counsel to Special Master Brush.

A. Evidentiary Sanctions and Jury Instructions

If a party does "not obey[] a [d]iscovery [o]rder," Rule 37(b)(2)(A)(i) permits the court to "direct[] that the matters embraced in the order or other designated facts be taken as established for purposes of the action." *See also Ins. Corp. of Ireland, Ltd. v. Compagnie des Bauxites de Guinee*, 456 U.S. 694, 695 (1982) (affirming sanction as "clearly appropriate" where petitioners engaged in continued delay in "obvious disregard of [court] orders").. Because Google failed to comply with the November 12 Order, the Court should "take[] as established for purposes of the action" that (1) Google can detect event-level Incognito traffic within its logs, (2) this Incognito data is linkable to users, so that (3) the class is ascertainable. Fed. R. Civ. P. 37(b)(2)(A)(i).

"Court intervention to protect Plaintiffs' ability to prove the [ir] allegations is necessary" when, as here, "[t]he withheld evidence is uniquely within the possession of the Defendants" and "there was no way for Plaintiffs to test their theory" as a result of the "documents withheld." *Guifu*, 281 F.R.D. at 39; *see also Zurich Am. Ins. Co. of Ill. v. World Priv. Sec., Inc.*, 2020 WL 8610839,

at *5 (C.D. Cal. Nov. 23, 2020) ("As a result of [defendant's] shortcomings, the Court finds that evidentiary sanctions against it are warranted. Plaintiffs assert that there are certain factual matters at issue in [Plaintiff's] discovery that must be established for the purposes of this action. Accordingly, the Court finds that the following matters are established for the purposes of this action..."). Such an adverse factual finding "merely serves as a mechanism for establishing facts that are being improperly hidden by the party resisting discovery." *Gibson v. Chrysler Corp.*, 261 F.3d 927, 948 (9th Cir. 2001) (noting presumption that party resisting discovery "is doing so because the information sought is unfavorable to its interest.").

Google should likewise be precluded from presenting any arguments in this case concerning whether Google can identify Incognito traffic within logs and whether that data is linkable to users. See Fed. R. Civ. P. 37(b)(2)(A)(ii); Von Brimer v. Whirlpool Corp., 536 F.2d 838, 844 (9th Cir. 1976). "Preclusionary orders ensure that a party will not be able to profit from its own failure to comply." Sas v. Sawabeh Info. Servs., 2015 WL 12711646, at *9 (C.D. Cal. Feb. 6, 2015) (quoting United States v. Sumitomo Marine & Fire Ins. Co., Ltd., 617 F.2d 1365, 1369 (9th Cir. 1980)). "[I]t is entirely reasonable to sanction [Google's] defiance of the [November 12] Order by precluding [it] from presenting evidence on [issues for which Google] ha[s] not provided timely and complete discovery." Id. "Discovery is first and foremost a way for one party to determine the evidence supporting another party's allegations, so it can properly investigate that evidence prior to trial." Lanier v. San Joaquin Valley Offs. Ass'n, 2016 WL 4764669, at *8 (E.D. Cal. Sept. 12, 2016). Google "has thwarted [Plaintiffs'] efforts to understand the basis of" Google's class identification arguments, so it is "appropriate, based on these failures, to preclude [Google] from introducing further facts or evidence in response to these issues." *Id.* Otherwise, Google will benefit from any evidentiary gaps that it has caused by refusing to comply with this Court's November 12 Order.

Evidentiary sanctions are particularly important for Plaintiffs' anticipated motion for class certification. In *Guifu Li v. A Perfect Day Franchise, Inc.*, 2011 WL 3895118, at *3 (N.D. Cal.

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Aug. 29, 2011), the court granted a preclusion remedy after the defendant refused to produce a corporate representative, in violation of a court order. The court agreed with Plaintiffs' concern that "the information withheld from Plaintiffs could very well bear on whether or not Plaintiffs are able to establish commonality of issues across the putative class." *Id.* "To remedy the prejudice suffered by Plaintiffs in their class certification motion" the Court prohibited the defendant from "utilizing declaration evidence . . . regarding its corporate structure or ownership in its opposition to class certification/collective action." *Id.* at *4; *see also Hanni v. Am. Airlines, Inc.*, 2009 WL 1505286, at *5 (N.D. Cal. May 27, 2009) (ordering that plaintiffs who failed to comply with discovery obligations "may not rely on any discovery provided after the close of class certification discovery in support of their motion for class certification or in opposition to Defendant's motion to deny class certification"); *Craftwood Lumber Co. v. Interline Brands, Inc.*, 2013 WL 4598490, at *13 (N.D. Ill. Aug. 29, 2013) (granting preclusion order where defendant "engaged in a pattern of stonewalling" production of databases it claimed contained evidence supporting its statutory defenses against liability).

Google's eighteen-month-long obstruction and misconduct warrants sanctions regardless of whether Google finally abides by the November 12 Order. Google has already jeopardized Plaintiffs' experts' ability to "conduct the required analysis within the time limits set [by the Court]." *Oracle USA, Inc. v. SAP AG*, 264 F.R.D. 541, 557 (N.D. Cal. 2009) (precluding party from presenting evidence concerning alleged lost profit damages for failing to timely produce the relevant data); *see also Apple Inc. v. Samsung Elecs. Co.*, 2012 WL 1595784, at *3 (N.D. Cal. May 4, 2012) (preclusion warranted for belated production of relevant source code because "Apple's experts were left with no meaningful opportunity to comprehend this code, even as they face criticism from Samsung in deposition (and assuredly at trial) that their code analysis was deficient"); *Hanni*, 2009 WL 1505286, at *5 (prohibiting party from relying on evidence produced after the close of class certification-related discovery when moving for class certification).

Rule 37(b)(2)(A) also "authorizes a court to issue an adverse-inference jury instruction as a remedy when 'bad faith or gross negligence has resulted in either the spoliation of evidence or failure to turn over relevant evidence." First Fin. Sec., Inc. v. Freedom Equity Grp., LLC, 2016 WL 5870218, at *3 (N.D. Cal. Oct. 7, 2016) (quoting Karnazes v. Cty. of San Mateo, 2010 WL 2672003, at *2-3 (N.D. Cal. July 2, 2010) (awarding an adverse-inference jury instruction when plaintiff failed to facilitate the deposition of her treating physician))). "[T]he court does not need to find bad faith before it issues an adverse-inference instruction as a sanction." First Fin. Sec., Inc., 2016 WL 5870218, at *6 (granting adverse inference jury instruction sanctions where "gross negligence [] resulted in a failure to turn over [] native-format data", the receipt of which would have provided "a valuable opportunity to verify the accuracy of the highly relevant facts"). Google's decision to withhold relevant evidence of its employees' successful efforts to identify Incognito traffic—at the same time that it represented to Plaintiffs in depositions and in the Special Master process that such evidence did not exist—surpasses gross negligence. As a remedy, Plaintiffs seek an instruction to the jury that "Google concealed and altered evidence regarding its ability to identify Incognito traffic." Such an adverse inference instruction would limit the benefit that Google can extract from its misconduct. See Kannan v. Apple Inc., 2020 WL 9048723, at *9 (N.D. Cal. Sept. 21, 2020) (ordering adverse jury instruction where party adopted a unilateral and limiting interpretation of discovery obligations, and either deleted or withheld responsive documents in sole possession he was ordered to produce).

B. Reimbursement of Fees Paid to Special Master Brush

The Federal Rules require one last sanction: Because Google violated a discovery order (three, actually), "the court *must* order [Google], the attorney[s] advising [it], or both to pay the reasonable expenses, including attorney's fees, caused by [its] failure" to comply. Fed. R. Civ. P. 37(b)(2)(C) (emphasis added). The Court repeatedly set forth a detailed process pursuant to which Google would produce data relevant to Plaintiffs' efforts to identify class members and quantify interceptions. In its April 30 and September 16 Orders (Dkts. 147-1, 273), the Court ordered

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Google to produce the named Plaintiffs' data in a three-step process overseen by Special Master Brush. Google was ordered to finish production by October 6, 2021, Dkt. 273 at 2, but because of Google's misconduct, the Court concluded on November 12 that Plaintiffs' data had "not yet been fully produced," Dkt. 299 ¶ 53 (Special Master's Report and Recommendation); Dkt. 331 at 3 (affirming finding). In its November 12 Order, the Court gave Google a second chance and restarted the data production process. Dkt. 331 Ex. 1. But here we are again. Only this time, as we have exhaustively explained, Google is tampering with evidence, not just concealing it. And that evidence goes to the core purpose of the proceedings before the Special Master: detection of private browsing. 10 Because Google has frustrated the purpose of the proceedings before the Special Master, 11 Plaintiffs' counsel and the class should not be made to pay for it. Google can avoid these monetary 12 sanctions only if it shows that its violations of the Court's Orders were "substantially justified." 13 Fed. R. Civ. P. 37(b)(2). But there is no way to justify such severe misconduct. See HRC-Hainan 14 Holding Co., LLC v. Yihan Hu, 2020 WL 1643786, at *3 (N.D. Cal. Apr. 2, 2020) (violation "was

not substantially justified" where the circumstances "strongly indicate[d]" bad faith); First Fin. Sec., Inc., 2016 WL 5870218, at *7 (same, even though the failure to produce native version of document as ordered by the court was "consistent with technological ignorance and . . . not necessarily the result of subjective bad faith"). Plaintiffs therefore ask the Court to order Google to reimburse Plaintiffs for all fees they have paid and will pay to Special Master Brush.

CONCLUSION

Plaintiffs request that the Court issue an Order to Show Cause for why it should not enter any or all of the aforementioned sanctions and remedies for Google's discovery misconduct:

Dated: February 26, 2022 MORGAN AND MORGAN

> By /s/ John A. Yanchunis 23

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Declaration of Mao ISO Plaintiff's Request for an Order to Show Cause

Redacted Version of Document Sought to be Sealed

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	UNITED STATES I	
20	NORTHERN DISTRI	CT OF CALIFORNIA
21	CHASOM BROWN, WILLIAM BYATT,	Case No.: 4:20-cv-03664-YGR-SVK
22	JEREMY DAVIS, CHRISTOPHER	
22	CASTILLO, and MONIQUE TRUJILLO	DECLARATION OF MARK C. MAO IN
23	individually and on behalf of all similarly	SUPPORT OF PLAINTIFFS' REQUEST
	situated,	FOR AN ORDER TO SHOW CAUSE
24		
25	Plaintiffs,	Referral: The Honorable Susan van Keulen
	VC	
26	VS.	
27	GOOGLE LLC,	
28	Defendant.	
- [

DECLARATION OF MARK C. MAO

I am a partner with the law firm of Boies Schiller Flexner LLP, counsel for Plaintiffs

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05757329.

I, Mark C. Mao, declare as follows.

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in this matter. I am an attorney at law duly licensed to practice before all courts of the State of

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California. I have personal knowledge of the matters set forth herein and am competent to testify.

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I submit this Declaration in support of Plaintiffs' Request for the Court to issue an Order to Show Cause for Why Google Should Not Be Sanctioned for Discovery Misconduct.

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On January 31, 2022, Google produced for the first time a document titled "Detect 3.

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3P Cookies Blocking Browsers" that was "last updated: 05/05/2021." Ex. 21, GOOG-CABR-

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4. This document, for the first time, indicated to Plaintiffs that Google submitted to

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team a plan to change Google's logging practices to log a its or

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"maybe chrome incognito" field in approximately logs called logs. Google did so to

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support a Dashboard tool to monitor and analyze traffic from browsers that block third-party

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cookies, including Chrome Incognito, and assess their revenue impact on Google. Plaintiffs

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promptly followed up with Google and demanded further information on the Dashboard referenced

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in that document. Ex. 21, GOOG-CABR-05757329 at -31-32.

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5. On February 18, 2022, Google produced approximately 283 documents from Bert Leung's custodial files. This production followed a ruling from the Court directing Google to tell

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Plaintiffs the "hit counts" for Mr. Leung's documents. Contrary to Google's assertions of burden

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with respect to producing Mr. Leung's documents, Google informed Plaintiffs that their search

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term proposal resulted in just 982 hits and agreed to produce responsive documents.

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6. The documents Google produced from Mr. Leung's files on February 18, 2022, appeared to confirm for the first time several key pieces of information that Google never

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previously disclosed to Plaintiffs, the Special Master, or the Court.

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7. *First*, the team had actually approved the plan to log or the "maybe chrome incognito" bit in approximately logs. Ex. 3, GOOG-BRWN-

00845423.

- 8. Second, following that approval, Google implemented the change and began logging the "maybe_chrome_incognito" field, likely around May or June 2021 after the approved the change. Ex. 3, GOOG-BRWN-00845423; Ex. 9, GOOG-BRWN-00845312 at -18.
- 9. *Third*, Google engineers Bert Leung and Mandy Liu spent the next several months continuing to refine and improve their Dashboard tool to detect and monitor third-party cookie blocking based on those logging changes. Ex. 22, GOOG-BRWN-00845281; Ex. 23, GOOG-BRWN-00845275; Ex. 24, GOOG-BRWN-00845274.
- 10. Google had previously never disclosed to Plaintiffs, the Special Master, or the Court (a) that it had actually implemented a change to its logging practices in 2021 to log a "maybe_chrome_incognito" field in (apparently) logs or (b) the specific logs in which that field resides. To the contrary, as explained below and in Plaintiffs' accompanying memorandum, Google went to great lengths to conceal this information throughout the discovery process (and particularly in the last several months during the Court-ordered Special Master process).
- In September 2021, Google for the first time produced three *earlier* versions of the document titled "Detect 3P Cookies Blocking Browsers" that discussed the possibility of logging a "maybe_chrome_incognito" field. None of those documents (a) indicated that the "maybe_chrome_incognito" field was actually implemented or (b) listed the specific logs in which the field would ultimately be included.
- 12. To the contrary, the most up-to-date version of the document that Google had produced (prior to January 31, 2022) discussed an *earlier* plan—which Google subsequently modified—to log the "maybe_incognito_bit" in a set of logs called logs. These were *completely different logs* from the logs in which Google appears to have ultimately implemented the "maybe_chrome_incognito" field. For example, Google produced one such document from Chris Liao's files titled "Detect 3P Cookies Blocking Browsers," which (a) was "last updated: 05/04/2021" and (b) discussed the abandoned logging plan (as opposed to the

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logging plan that was apparently added to the document on 05/05/2021). A true and correct copy of the most up-to-date version of the document Google produced in 2021 is attached as Exhibit 25 (GOOG-CABR-03668216).

- 13. On November 12, 2021, the Court issued an order requiring that "Google shall provide a declaration, under penalty of perjury from Google, not counsel, that 1. To the best of its knowledge, Google has provided a complete list of data sources that contain information relevant to Plaintiffs' claims " Dkt. 331 at 8 (emphasis added).
- 14. On November 18, 2021, Google submitted a declaration from Andre Golueke, "a Discovery Manager within the Legal Department at Google LLC." Dkt. 338. The declaration certified that "Google has provided a complete list of sources that contain information about Plaintiffs relevant to Plaintiffs' claims. The data sources are listed in Exhibit A."
- Exhibit A to Google's declaration, in turn, *only listed* of the approximately 15. logs that may contain the "maybe chrome incognito" field according to the most up-todate version of the "Detect 3P Cookies Blocking Browsers" document that Google had produced in on January 31, 2022. Compare Ex. Dkt. 338-1 (Google's Ex. A) with Ex. 3, GOOG-BRWN-00845423. And Exhibit A also only listed of the approximately logs in which Google had *contemplated* logging the "maybe chrome incognito" bit according to the earlier design documents Google produced in September 2021. The chart below, created by Plaintiffs' counsel, illustrates the extent of the declaration's omissions:

05/04/2021 "Detect 3P Blocking Browsers" logs	(Produced on	05/05/2021 "Detect 3P Blocking Browsers" Logs	(Produced on	Same as
(Produced on 09/24/2021)	11/18/2021)?	(Produced on 01/31/2021)	11/18/2021)?	Logs?
	YES		YES	NO
	YES		YES	NO
	YES		NO	NO
	NO		NO	NO
	NO		NO	NO
	NO		NO	NO
	NO		NO	NO
	NO		NO	NO
	NO		NO	NO
	NO		NO	NO
	NO		NO	NO
	NO		NO	NO
	NO		NO	NO
	NO		NO	NO
	NO		NO	NO
	NO		NO	NO
			NO	NO
			NO	NO
			NO	NO

1	a 'log analysis of Chrome Incognito' in and around mid-2020. See, e.g., GOOG-CABR-
2	05280756." Google did not answer that question, either. Google instead evaded it by merely
3	quoting back <i>one</i> of the logs that was already mentioned in the email that Plaintiffs cited. ("Google
4	used in the analysis of Ad Manager browsing traffic described in GOOG-
5	CABR-05280756."). Google's evasion was improper. Google has subsequently clarified in meet-
6	and-confers that Mr. Leung's analysis was not limited to the logs mentioned in this one document,
7	and yet Plaintiffs still do not have a complete list of every data source that Mr. Leung studied,
8	much less a complete list of the logs in which "maybe_chrome_incognito" field has officially been
9	implemented.

- 31. Over the course of the past week, Plaintiffs have asked Google to remedy the prejudice it has caused in multiple, reasonable ways: (a) by producing Mandy Liu's custodial documents that hit on limited search terms tied to her work with Mr. Leung concerning the "maybe_chrome_incognito" field and permitting a 2-hour deposition of her; (b) by extending the fact discovery cut-off so that Plaintiffs can complete their discovery of Plaintiffs' data and the "maybe_chrome_incognito" field; and (c) by identifying every other log that contains the "maybe_chrome_incognito" bit and promptly producing all schema, all field names, and all field descriptions from such logs (and subsequently searching them and producing full results). Google has simply refused.
- 32. Attached hereto as **Exhibit 1** is a true and correct copy of a document Google produced in discovery labeled GOOG-BRWN-00845639. The document was produced on February 18, 2022.
- 33. Attached hereto as **Exhibit 2** is a true and correct copy of a document Google produced in discovery labeled GOOG-BRWN-00845596. The document was produced on February 18, 2022.
- 34. Attached hereto as **Exhibit 3** is a true and correct copy of a document Google produced in discovery labeled GOOG-BRWN-00845423. The document was produced on February 18, 2022.

1	35. Attached hereto as Exhibit 4 is a true and correct copy of a document Google
2	produced in discovery labeled GOOG-BRWN-00023909. The document was produced on
3	February 1, 2021.
4	36. Attached hereto as Exhibit 5 is a true and correct copy of Plaintiffs' Interrogatories Set
5	2.
6	37. Attached hereto as Exhibit 6 is a true and correct copy of Google's Responses and
7	Objections Plaintiffs' Interrogatories Set 2.
8	38. Attached hereto as Exhibit 7 is a true and correct copy of a February 21, 2022 email
9	exchange between counsel for Plaintiffs and counsel for Google.
10	39. Attached hereto as Exhibit 8 are excerpts from the December 2, 2021 deposition of
11	Google employee Chris Liao.
12	40. Attached hereto as Exhibit 9 is a true and correct copy of a document Google produced
13	in discovery labeled GOOG-BRWN-00845312. The document was produced on February 18,
14	2022.
15	41. Attached hereto as Exhibit 10 is a true and correct copy of a document Google
16	Produced in discovery labeled GOOG-BRWN-00845569. The document was produced on
17	February 18, 2022.
18	42. Attached hereto as Exhibit 11 is a true and correct copy of a document Google
19	produced in discovery labeled GOOG-BRWN-00845277. The document was produced on
20	February 18, 2022.
21	43. Attached hereto as Exhibit 12 are excerpts from a document Google produced in
22	discovery labeled GOOG-CABR-05144884. The document was produced on November 16, 2021.
23	44. Attached hereto as Exhibit 13 is a true and correct copy of Google's Responses and
24	Objections to Plaintiffs' First Set of Requests for Production (Nos. 1-19).
25	45. Attached hereto as Exhibit 14 is a true and correct copy of a document Google
26	produced in discovery labeled GOOG-CABR-04324934. The document was produced on October
27	5, 2021.

1	46. Attached hereto as Exhibit 15 is a true and correct copy of a document Google
2	produced in discovery labeled GOOG-BRWN-00845477. The document was produced on
3	February 18, 2022.
4	47. Attached hereto as Exhibit 16 is a true and correct copy of a document Google
5	produced in discovery labeled GOOG-BRWN-00845481. The document was produced on
6	February 18, 2022.
7	48. Attached hereto as Exhibit 17 is a true and correct copy of a document Google
8	produced in discovery labeled GOOG-BRWN-00845437. The document was produced on
9	February 18, 2022. Part of the document is not visible because of how Google produced it.
10	Plaintiffs consulted the metadata for the full text.
11	49. Attached hereto as Exhibit 18 is a true and correct copy of a document Google
12	produced in discovery labeled GOOG-CABR-05280756. The document was produced on
13	November 24, 2021.
14	50. Attached hereto as Exhibit 19 are excerpts of Google's Responses and
15	Objections to Plaintiffs' Ninth Set of Interrogatories.
16	51. Attached hereto as Exhibit 20 is a true and correct copy of a February 23, 2022 email
17	exchange between counsel for Plaintiffs and counsel for Google.
18	52. Attached hereto as Exhibit 21 is a true and correct copy of a document Google
19	produced in discovery labeled GOOG-CABR-05757329. The document was produced on January
20	31, 2022.
21	53. Attached hereto as Exhibit 22 is a true and correct copy of a document Google
22	produced in discovery labeled GOOG-BRWN-00845281. The document was produced on
23	February 18, 2022.
24	54. Attached hereto as Exhibit 23 is a true and correct copy of a document Google
25	produced in discovery labeled GOOG-BRWN-00845275. The document was produced on
26	February 18, 2022.
27	55. Attached hereto as Exhibit 24 is a true and correct conv. of a document Google

1	produced in discovery labeled GOOG-BRWN-00845274. The document was produced or
2	February 18, 2022.
3	56. Attached hereto as Exhibit 25 is a true and correct copy of a document Google
4	produced in discovery labeled GOOG-CABR-03668216. The document was produced or
5	September 24, 2021.
6	
7	I declare under penalty of perjury under the laws of the United States of America that the
8	foregoing is true and correct. Executed this 25th day of February, 2022, at Freemont, California.
9	<u>/s/ Mark Mao</u>
10	
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EXHIBIT 1 FILED UNDER SEAL

Message

From: Google Forms [forms-receipts-noreply@google.com]

Sent: 6/9/2020 12:15:35 AM **To**: bertleung@google.com

Subject: PWG-Display Sellside Silo Office Hours Booking



Thanks for filling out PWG-Display Sellside Silo Office Hours Booking

Here's what we got from you:

PWG-Display Sellside Silo Office Hours Booking

Complete this form to book a slot for PWG-Display Office Hours. If you've booked a slot and need to cancel, please ping/email katrinaswanson@.

Your email address (bertleung@google.com) was recorded when you submitted this form.

Top of Form

What is your primary goal for attending Office Hours? *

Select the first option that applies.

I was asked by a PWG representative (Display or otherwise) to attend PWG-Display Office Hours

I need the privacy bit for my launch approved

I have a few simple privacy questions or concerns

I have multiple or complex privacy questions / concerns

Help us help you help us all. Details about your project help us get the right folks in the room so that we can most efficiently answer your questions!

What is the name of your project/launch? * Detect 3P Cookies Blocking Browsers
Who is the presenter? * Please enter the presenter's username. This could be you or another person. bertleung
Who else should be invited to the Office Hours slot? * Comma separated list of usernames. If you're not the presenter but need to attend, add yourself! bertleung
What is this launch/product about? Give the elevator pitch, providing a quick summary to someone who has no idea what you do. * Detect 3P cookie blocking browsers (Safari ITP, Firefox ETP, Chrome Incognito, etc) in ad serving, and log this
information for monitoring and analysis.
In your opinion, what are the privacy or other vulnerabilities? Do you propose any mitigation? * Potential privacy risk of logging inferred Chrome Incognito detection, would like to get feedback from privacy gurus.
In your opinion, what are the privacy or other vulnerabilities? Do you propose any mitigation? *
In your opinion, what are the privacy or other vulnerabilities? Do you propose any mitigation? * Potential privacy risk of logging inferred Chrome Incognito detection, would like to get feedback from privacy gurus. If you have an Ariane launch, please link it below: *

This is the first design.	
Have you visited PWG-Display office hours before for this topic? I	nclude the date if you remember it.
This is the first time.	
Have you consulted directly with anyone in any PWG or the Ads F Hours? If so, who? *	Privacy team outside of Office
This includes anyone from the Ads Internal Controls team, Ads Transparency and Controldentity, or Ads Partner Policy team.	rol team, Serving Ads Privacy Team, Ads
No.	
Have you been in contact with your PCounsel regarding this launce	ch? If so, please include their LDAP.
Not sure who your PCounsel is? Check https://goto.google.com/whichlawyer Not yet.	
Booking Details Tell us when you want to attend Office Hours!	
When would you like to attend Office Hours? * If none of the available options work for you, please reach out to pwg-display@.	
	Thu Jun 18 2020 10:30:00 GMT- 0700 (Pacific Daylight Time)
Thu Jun 18 2020 10:45:00 GMT-0700 (Pacific Daylight Time)	
	Thu Jun 25 2020 10:30:00 GMT- 0700 (Pacific Daylight Time)

Case 4:20-cv-03664-YGR Document 595 Filed 06/01/22 Page 49 of 90

Thu Jun 25 2020 10:45:00 GMT-0700 (Pacific Daylight Time)

Thu Jul 09 2020 10:30:00 GMT-0700 (Pacific Daylight Time)

Thu Jul 09 2020 10:45:00 GMT-0700 (Pacific Daylight Time)

Bottom of Form

Create your own Google Form

EXHIBIT 2 FILED UNDER SEAL

Case 4:20-cv-03664-YGR Document 595 Filed 06/01/22 Page 51 of 90

Message	
From: Sent: To: Subject:	Mandy Liu (Google Docs) [comments-noreply@docs.google.com] 10/6/2020 12:34:54 AM bertleung@google.com Detect 3P Cookie nit: we will need a more scary name t
Mandy	Liu resolved a comment in the following document
Detect 3F	Cookie Blocking Browser Technical Design
maybecl	nrome_incognito
n Ma	ert Leung it: we will need a more scary name to deter un-approved usages. andy Liu
20000000	arked as resolved
Ор	en
Google L	LC, 1600 Amphitheatre Parkway, Mountain View, CA 94043, USA

You have received this email because you are a participant in this thread. Change what Google Docs sends you. You can reply to this email to reply to the discussion.

Redacted Version of Document Sought to be Sealed

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1
                 IN THE UNITED STATES DISTRICT COURT
 2
               FOR THE NORTHERN DISTRICT OF CALIFORNIA
 3
                           SAN JOSE DIVISION
 4
                               ---000---
 5
     PATRICK CALHOUN, et al.,
     on behalf of themselves and
     all others similarly
 6
     situated,
 7
                Plaintiffs,
                                     ) Case No.
                                      )5:20-cv-5146-LHK-SVK
 8
     vs.
 9
     GOOGLE LLC,
10
                Defendant.
11
     CHASOM BROWN, et al.,
     on behalf of themselves and
12
     all others similarly
13
     situated,
14
                Plaintiffs,
                                     ) Case No.
                                      )5:20-cv-03664-LHK
15
     VS.
16
     GOOGLE LLC,
17
                Defendant.
18
                               ---000---
19
                    Videotaped Zoom Deposition of
20
                       HUEI-HUNG (CHRIS) LIAO
                 CONFIDENTIAL, ATTORNEYS' EYES ONLY
21
2.2
                      Friday, December 3, 2021
                               ---000---
23
24
     Katy E. Schmidt
25
     RPR, RMR, CRR, CSR 13096
     Veritext Job No.: 4962198
                                                        Page 1
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1 IN THE UNITED STATES DISTRICT COURT	1 APPEARANCES CONTINUED:
2 FOR THE NORTHERN DISTRICT OF CALIFORNIA	
3 SAN JOSE DIVISION 4000	2 Also present:
5 PATRICK CALHOUN, et al ,)	3 David West, Videographer
on behalf of themselves and)	4 Ryan McGee, In-house counsel
6 all others similarly)	5 Toni Baker, In-house counsel
situated,) 7	
Plaintiffs,)Case No	6
8)5:20-cv-5146-LHK-SVK	000
vs)	7
GOOGLE LLC,	
10)	8
Defendant)	9
11)	10
CHASOM BROWN, et al ,) 12 on behalf of themselves and)	11
all others similarly)	
13 situated,	12
	13
14 Plaintiffs,)Case No)5:20-cv-03664-LHK	14
)5.20-CV-05004-LITK	
)	15
16 GOOGLE LLC,	16
) Defendant	17
17 Defendant)	
18	18
BE IT REMEMBERED that, pursuant to Notice, and	19
19 on Friday, the 3rd day of December, 2021, commencing at	20
the hour of 9:05 a m, thereof, in Sunnyvale, 20 California, before me, KATY E SCHMIDT, a Certified	
Shorthand Reporter in and for the County of Yolo, State	21
21 of California, there virtually personally appeared	22
22 HUEI-HUNG (CHRIS) LIAO	23
23 called as a witness herein, who, being by me first duly sworn, was thereupon examined and interrogated as	24
24 hereinafter set forth	
25	25
Page 2	Page 4
1 ADDEAD ANCES	
1 APPEARANCES: 2 For The Plaintiffs:	1 INDEX OF EXAMINATION
1 APPEARANCES: 2 For The Plaintiffs: 3 (Appeared via Zoom)	
2 For The Plaintiffs: 3 (Appeared via Zoom) 4 BLEICHMAR FONTI & AULD LLP	200o
2 For The Plaintiffs: 3 (Appeared via Zoom) 4 BLEICHMAR FONTI & AULD LLP BY: LESLEY WEAVER, Esq	200o 3 Page
2 For The Plaintiffs: 3 (Appeared via Zoom) 4 BLEICHMAR FONTI & AULD LLP BY: LESLEY WEAVER, Esq 5 555 12th Street, Suite 1600	200o
2 For The Plaintiffs: 3 (Appeared via Zoom) 4 BLEICHMAR FONTI & AULD LLP BY: LESLEY WEAVER, Esq	200o 3 Page 4 Examination by Mr. Mao 09
2 For The Plaintiffs: 3	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197
2 For The Plaintiffs: 3 (Appeared via Zoom) 4 BLEICHMAR FONTI & AULD LLP BY: LESLEY WEAVER, Esq 5 555 12th Street, Suite 1600 Oakland, California 994607 6 415 445 4003 lweaver@bfalaw.com 7	200o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 600o
2 For The Plaintiffs: 3 (Appeared via Zoom) 4 BLEICHMAR FONTI & AULD LLP BY: LESLEY WEAVER, Esq 5 555 12th Street, Suite 1600 Oakland, California 994607 6 415 445 4003 lweaver@bfalaw com 7 (Appeared via Zoom)	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197
2 For The Plaintiffs: 3	200o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 600o 7
2 For The Plaintiffs: 3 (Appeared via Zoom) 4 BLEICHMAR FONTI & AULD LLP BY: LESLEY WEAVER, Esq 5 555 12th Street, Suite 1600 Oakland, California 994607 6 415 445 4003 lweaver@bfalaw com 7 (Appeared via Zoom)	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER
2 For The Plaintiffs: 3	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9
2 For The Plaintiffs: 3 (Appeared via Zoom) 4 BLEICHMAR FONTI & AULD LLP BY: LESLEY WEAVER, Esq 5 555 12th Street, Suite 1600 Oakland, California 994607 6 415 445 4003 lweaver@bfalaw com 7 (Appeared via Zoom) 8 SIMMONS HANLY CONROY 9 BY: JASON "JAY" BARNES, Esq BY: AN TRUONG, Esq 10 One Court Street	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER
2 For The Plaintiffs: 3	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9
2 For The Plaintiffs: 3 (Appeared via Zoom) 4 BLEICHMAR FONTI & AULD LLP BY: LESLEY WEAVER, Esq 5 555 12th Street, Suite 1600 Oakland, California 994607 6 415 445 4003 lweaver@bfalaw com 7 (Appeared via Zoom) 8 SIMMONS HANLY CONROY 9 BY: JASON "JAY" BARNES, Esq BY: AN TRUONG, Esq 10 One Court Street	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9 10 Page Line 11
2 For The Plaintiffs: 3	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9 10 Page Line 11 12 (NOTHING OFFERED.)
2 For The Plaintiffs: 3	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9 10 Page Line 11
2 For The Plaintiffs: 3	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9 10 Page Line 11 12 (NOTHING OFFERED.)
2 For The Plaintiffs: 3	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9 10 Page Line 11 12 (NOTHING OFFERED.) 13o0o
2 For The Plaintiffs: 3	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9 10 Page Line 11 12 (NOTHING OFFERED.) 13o0o 14 15
2 For The Plaintiffs: 3	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9 10 Page Line 11 12 (NOTHING OFFERED.) 13o0o
2 For The Plaintiffs: 3	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9 10 Page Line 11 12 (NOTHING OFFERED.) 13o0o 14 15 16
2 For The Plaintiffs: 3	200o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 600o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9 10 Page Line 11 12 (NOTHING OFFERED.) 1300o 14 15 16 17
2 For The Plaintiffs: 3	200o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 600o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9 10 Page Line 11 12 (NOTHING OFFERED.) 1300o 14 15 16 17 18
2 For The Plaintiffs: 3	200o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 600o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9 10 Page Line 11 12 (NOTHING OFFERED.) 1300o 14 15 16 17
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2 For The Plaintiffs: 3 (Appeared via Zoom) 4 BLEICHMAR FONTI & AULD LLP BY: LESLEY WEAVER, Esq 5 555 12th Street, Suite 1600 Oakland, California 994607 6 415 445 4003 lweaver@bfalaw com 7 (Appeared via Zoom) 8 SIMMONS HANLY CONROY 9 BY: JASON "JAY" BARNES, Esq BY: AN TRUONG, Esq 10 One Court Street Alton, Illinois 62002 11 618 693 3104 jaybarnes@simmonsfirm com 12 (Appeared via Zoom) 13 BOIES SCHILLER FLEXNER LLP 14 BY: MARK MAO, Esq BY: BEKO RICHARDSON, Esq 15 BY: ERIKA NYBORG-BURCH, Esq 44 Montgomery Street, 41st Floor 16 San Francisco, California 94104 415 293 6800 17 mmao@bsfllp com 18 For The Defendants: 19 (Appeared via Zoom) 20 Quinn Emanuel Urquhart & Sullivan LLP BY: JOSEF ANSORGE, Esq 21 BY: TRACY GAO, Esq 51 Madison Avenue, 22nd Floor New York, New York 10010	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9 10 Page Line 11 12 (NOTHING OFFERED.) 13o0o 14 15 16 17 18 19 20 21 22
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2 For The Plaintiffs: 3	2o0o 3 Page 4 Examination by Mr. Mao 09 5 Examination by Mr. Ansorge 197 6o0o 7 8 QUESTIONS INSTRUCTED NOT TO ANSWER 9 10 Page Line 11 12 (NOTHING OFFERED.) 13o0o 14 15 16 17 18 19 20 21 22 23

1 BY MR. MAO: 12:53	1 P-logs and B-logs or variance from P-logs and B-logs? 12:56
2 Q. Good afternoon, Mr. Liao. 12:53	2 A. No. 12:56
3 If I can trouble you to pull Exhibit No. 4. 12:53	3 Q. So what is the identity handler there doing 12:56
4 Thank you. 12:53	4 with regard to P-logs and B-logs? 12:57
5 A. Exhibit No. 4. 12:53	5 A. In the middle diagram, the identity handler is 12:57
6 Q. Yeah. It's the "Ads Identity & 12:53	6 not directly interacting with P-logs and B-logs. 12:57
7 Infrastructure" document again. 12:53	7 Q. What instead is it doing? 12:57
8 A. I have it. 12:53	8 A. I believe the diagram is trying to convey, for 12:57
9 Q. If you don't mind going to page 11, which is 12:53	9 example, encrypted Biscotti cookie coming from the 12:57
10 on the bottom 24. It should be let's see that 12:53	10 external world. And then the identity handler, which 12:57
11 page. I know it's a very long document. 12:53	11 eventually became handles it by decrypting and then 12:57
12 A. I have it. 12:53	12 later re-encrypting into other using other forms of 12:57
13 Q. Okay. Great. 12:54	13 encryption, and then making the correct identity signals 12:57
By the way, were you the author or one of the 12:54	14 and privacy instructions available to the rest of this 12:57
15 authors of this presentation? 12:54	15 stack, which, I believe, is represented by the larger 12:58
16 A. Yes. 12:54	16 box at the middle of the graphic. 12:58
17 Q. On the top right there, what exactly is an 12:54	17 Q. So what my is something wrong with my 12:58
18 identity handler? 12:54	18 phraseology in saying that in this situation would 12:58
19 A. I believe I created this slide, but I borrowed 12:54	19 be handling data from both P-logs and B-logs? 12:58
20 some graphics created earlier by other people. And the 12:54	20 How would I state that properly? 12:58
21 diagrams containing the identity handler was one of the 12:54	21 MR. ANSORGE: Objection. Vague. Form. 12:58
22 graphics I borrowed. 12:54	22 THE WITNESS: I'm not exactly sure. But I 12:58
23 In this case, I think identity handlers refers 12:54	23 can I can my understanding is that in this 12:58
24 to what eventually became 12:54	24 case is processing identity signals as they come from 12:58
25 Q. Got it. 12:54	25 the external world, and that is not directly 12:58
Page 122	Page 124
1 And so this is an older this is the old 12:54	1 producing P-logs or B-logs. 12:58
2 original serving model and not the current serving 12:54	2 BY MR. MAO: 12:58
2 original serving model and not the current serving 12:54 3 model. 12:54	2 BY MR. MAO: 12:58 3 Q. Got it. 12:58
3 model. 12:54	3 Q. Got it. 12:58
3 model. 12:54 4 Is that right? Or do I have that wrong? 12:54	3 Q. Got it. 12:58 4 So are these signals coming in from the 12:58
3 model. 12:54 4 Is that right? Or do I have that wrong? 12:54 5 A. As I stated, I did not create the graphics on 12:55	3 Q. Got it. 12:58 4 So are these signals coming in from the 12:58 5 external world the same signals that would have or I 12:58
3 model. 12:54 4 Is that right? Or do I have that wrong? 12:54 5 A. As I stated, I did not create the graphics on 12:55 6 this particular slide. So I think some of the graphics 12:55	3 Q. Got it. 12:58 4 So are these signals coming in from the 12:58 5 external world the same signals that would have or I 12:58 6 guess variants of the signals that went into the P-logs 12:59
3 model. 12:54 4 Is that right? Or do I have that wrong? 12:54 5 A. As I stated, I did not create the graphics on 12:55 6 this particular slide. So I think some of the graphics 12:55 7 does look outdated, including referring having 12:55	3 Q. Got it. 12:58 4 So are these signals coming in from the 12:58 5 external world the same signals that would have or I 12:58 6 guess variants of the signals that went into the P-logs 12:59 7 and B-logs? 12:59
3 model. 12:54 4 Is that right? Or do I have that wrong? 12:54 5 A. As I stated, I did not create the graphics on 12:55 6 this particular slide. So I think some of the graphics 12:55 7 does look outdated, including referring having 12:55 8 referred to with a different name. 12:55	3 Q. Got it. 12:58 4 So are these signals coming in from the 12:58 5 external world the same signals that would have or I 12:58 6 guess variants of the signals that went into the P-logs 12:59 7 and B-logs? 12:59 8 A. I can't speak to the full extent of the 12:59
3 model. 12:54 4 Is that right? Or do I have that wrong? 12:54 5 A. As I stated, I did not create the graphics on 12:55 6 this particular slide. So I think some of the graphics 12:55 7 does look outdated, including referring having 12:55 8 referred to with a different name. 12:55 9 Q. Okay. But I think what you're trying to 12:55	3 Q. Got it. 12:58 4 So are these signals coming in from the 12:58 5 external world the same signals that would have or I 12:58 6 guess variants of the signals that went into the P-logs 12:59 7 and B-logs? 12:59 8 A. I can't speak to the full extent of the 12:59 9 information that goes into P-logs and B-logs. But 12:59
3 model. 12:54 4 Is that right? Or do I have that wrong? 12:54 5 A. As I stated, I did not create the graphics on 12:55 6 this particular slide. So I think some of the graphics 12:55 7 does look outdated, including referring having 12:55 8 referred to with a different name. 12:55 9 Q. Okay. But I think what you're trying to 12:55 10 what you were trying to show in the middle column of 12:55	3 Q. Got it. 12:58 4 So are these signals coming in from the 12:58 5 external world the same signals that would have or I 12:58 6 guess variants of the signals that went into the P-logs 12:59 7 and B-logs? 12:59 8 A. I can't speak to the full extent of the 12:59 9 information that goes into P-logs and B-logs. But 12:59 10 identity signals and privacy instructions under some 12:59
3 model. 12:54 4 Is that right? Or do I have that wrong? 12:54 5 A. As I stated, I did not create the graphics on 12:55 6 this particular slide. So I think some of the graphics 12:55 7 does look outdated, including referring having 12:55 8 referred to with a different name. 12:55 9 Q. Okay. But I think what you're trying to 12:55 10 what you were trying to show in the middle column of 12:55 11 these three columns is that the identity handler 12:55	3 Q. Got it. 12:58 4 So are these signals coming in from the 12:58 5 external world the same signals that would have or I 12:58 6 guess variants of the signals that went into the P-logs 12:59 7 and B-logs? 12:59 8 A. I can't speak to the full extent of the 12:59 9 information that goes into P-logs and B-logs. But 12:59 10 identity signals and privacy instructions under some 12:59 11 circumstances can be present in P-logs and B-logs. 12:59
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1 also PPID on the right there, are these all external 01:00	1 I believe the parsing layer, the enrichment 01:03
2 signals I'm sorry signal identity signals 01:00	2 layer, and the selection layer, I believe they 01:03
3 coming in from the external world? 01:00	3 correspond to the previous diagram with the layers of 01:03
4 A. Yes. 01:00	4 the same names. 01:03
5 Q. And that is getting parsed on the top right 01:00	5 This one is the diagram I drew. I don't know 01:03
6 where it says the "Parsing Layer." And where does 01:00	6 if the entire yellowish box on this slide 14 refers to 01:03
7 sit in this chart? 01:00	7 or not, but I think the three layers represented on 01:03
8 A. In this chart, is represented by the 01:00	8 this slide do represent the same layers that I had 01:03
9 larger bounding box containing the individual smaller 01:00	9 designated for on the previous slide. 01:03
10 boxes. 01:00	10 BY MR. MAO:
11 Q. Got it. Okay. 01:00	11 Q. Got it. Got it. 01:04
12 So is the bigger gray box covering all the 01:01	So you would probably say at least for what's 01:04
13 yellow boxes. 01:01	13 sandwiched between the green end red layer and 01:04
And I guess are you trying to convey that it's 01:01	14 everything in between, that's essentially what would 01:04
15 ingesting the different identity signals coming in from 01:01	15 correspond to the gray portion in the prior graph in the 01:04
16 the external world to move downward in the process in 01:01	16 prior page? 01:04
17 terms of what comes out? 01:01	17 A. I think so. 01:04
18 MR. ANSORGE: Objection. Vague and form. 01:01	18 Q. Got it. Okay. That's super helpful. Thank 01:04
19 BY MR. MAO: 01:01	19 you so much. 01:04
20 Q. I'm just trying to understand literally what 01:01	20 (Plaintiffs' Exhibit 25 was 01:04
21 you're trying to convey with this graph. 01:01	21 marked for identification.) 01:04
22 A. The graph is trying to describe the 01:01	22 BY MR. MAO: 01:04
23 internal some of the internal components of by 01:01	23 Q. If you don't mind, I had introduced into 01:04
24 their logical functional grouping. 01:01	24 Exhibit let me just make sure I have the right number 01:04
25 Q. Ah. Got it. 01:01	25 here. Sorry. It should be Exhibit No. 25. Would you 01:04
Page 126	Page 128
1 And then if you move down one more page, and 01:01	1 1 11 11 11 11 10
And then if you move down one more page, and 01:01	1 mind pulling that? 01:04
2 you were asked about this as well yesterday, which is 01:01	2 A. Exhibit 25. 01:04
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1 A. Okay. I have it. 01:06	1 traffic? 01:10
2 Q. This looks to me to basically be a variant of 01:06	2 A. There is no explicit signal to identify 01:10
3 your prior graph, I think. 01:07	3 incognito mode traffic. 01:10
4 You could take a look 01:07	4 Q. Were you ever involved in any discussions on 01:10
5 A. It appears so. 01:07	5 whether or not should be designed to receive and 01:10
6 Q. Yeah. 01:07	6 parse such a signal? 01:10
7 So my question to you, and I think I think 01:07	7 A. I was involved in projects having to work with 01:10
8 Mr. Barnes asked this, either from this graph or the 01:07	8 incognito mode. 01:10
9 graph like you saw before on the other exhibit that was 01:07	9 Q. Was there a discussion on whether or not that 01:10
10 right below this. 01:07	10 should be a signal to ? Whether or not that design 01:10
11 I think my question to you is I think 01:07	11 should include, you know, a signal to saying that 01:10
12 oh, yes. There, I see it. It's been grayed out. 01:07	12 the user or device was browsing in incognito mode? 01:10
You see on the top right, right under "Parse 01:07	13 A. I do not recall if there was a specific 01:10
14 PPID," there's a "Parse privacy req params"? 01:07	14 discussion around using the URL parameter as a signal 01:10
15 Again, I might be referring to the wrong one 01:07	15 to to indicate incognito mode. 01:10
16 of two graphs. But I believe that you said that that's 01:07	But as I stated, I was involved in projects 01:11
17 parsing whether or not the incoming signal from the 01:07	17 related to incognito mode. 01:11
18 external world contains a privacy preference or setting 01:07	18 Q. How about amongst those projects that you were 01:11
19 of some type. 01:07	19 involved, were there any discussions on whether or not 01:11
20 Is that do I have that right? 01:08	20 there were any other types of signals other than a URL 01:11
21 MR. ANSORGE: Objection. Mischaracterizes 01:08	21 parameter signal for incognito traffic that would be 01:11
22 prior testimony. 01:08	22 given to at the 01:11
23 THE WITNESS: For the box of "parse privacy 01:08	23 MR. ANSORGE: Objection. 01:11
24 req," which stands for "request," parameters, the 01:08	MR. MAO: Sorry. It was at the parsing layer, 01:11
25 purpose of this piece of logic is to parse the URL 01:08	25 Ms. Court Reporter. 01:11
Page 130	Page 132
1 parameters that are related to privacy treatment as we 01:08	1 Yeah. Go ahead, Joey, please. 01:11
2 receive from the URL network request itself. 01:08	2 MR. ANSORGE: Yeah. Objection. Vague. 01:11
3 As I stated yesterday, I believe some of the 01:08	3 THE WITNESS: Can you clarify which part of 01:11
4 examples of such a URL can be, for example, GDPR, which 01:08	4 you're referring to in this question? 01:11
5 indicates to our systems that applicable GDPR behaviors 01:08	5 BY MR. MAO: 01:11
6 have to be enabled for this particular ad query. 01:08	6 Q. Sure. Sure. 01:11
7 I believe another example I gave was TFCD, 01:08	7 I'm looking at the parsing layer. And my 01:11
8 which stands for "treat for child directed." I believe 01:09	8 understanding of that is that that's the first layer 01:11
9 the presence of the parameter enables our systems to 01:09	9 that kind of hits that says, hey, here are all the 01:11
10 treat the ad query with the necessary child directed 01:09	10 signals coming from the external world in which, you 01:11
11 treatments. 01:09	11 know, like might be relevant, you know, for terms of 01:11
12 BY MR. MAO:	12 UIS digesting and then spitting out whatever it spits 01:11
13 Q. Got it. Got it. 01:09	13 out on the other end. 01:11
As far as you're aware, amongst these privacy 01:09	My question is you limited your prior 01:11
15 signals, is there one for incognito mode browsing on 01:09	15 answers to a URL signal for and you not being aware 01:12
16 Chrome? 01:09	16 of that being a discussion. 01:12
17 A. No. 01:09	My question to you is whether or not you're 01:12
18 Q. Is there a reason that you're aware as to why 01:09	18 aware of a discussion or proposal on a non-URL signal 01:12
19 that would not be a privacy req parameter for ? 01:09	19 that would be sent to ? 01:12
20 MR. ANSORGE: Objection. Form. 01:09	20 A. I do not recall the specifics of such a 01:12
THE WITNESS: I am not aware of a URL 01:09	21 discussion. I do not recall if such a discussion 01:12
22 parameter that would indicate incognito mode. 01:09	22 specific discussion happened. 01:12 23 But as I stated, I was involved in projects 01:12
23 BY MR. MAO: 01:09	23 But as I stated, I was involved in projects 01:12
Q. What about a parameter specifically to signal 01:09	, · · ·
	24 that have have to do with incognito mode. And there 01:12
25 to to parse out that, oh, this is incognito mode 01:09 Page 131	, · ·

1 approximate incognito traffic. However, we were not 01:12	1 BY MR. MAO:
2 able to identify any definitive or reliable signal to 01:12	2 Q. Did you explore whether or not you would use 01:15
3 identify incognito mode in the end. 01:12	3 the X-Client-Data header as a signal? 01:15
4 Q. That's based on existing signals or is that 01:12	4 A. Yes. 01:15
5 based on signals that you can build? 01:13	5 Q. And what was the conclusion on that? 01:16
6 MR. ANSORGE: Objection. Vague. 01:13	6 A. We did explore the use of X-Data User 01:16
7 THE WITNESS: The conversations were based on 01:13	7 Data Data User header I apologize. I don't have 01:16
8 signals that existed at the time. We did not, to my 01:13	8 the exact code name. 01:16
9 best knowledge, go on to build any dedicated signals 01:13	9 In the end it was determined that the accuracy 01:16
10 afterwards either. 01:13	10 of using that header as the indication for incognito 01:16
11 BY MR. MAO: 01:13	11 mode is rather low. And, again, I am not a Chrome 01:16
12 Q. What was the reason you didn't build any 01:13	12 engineer, so I do not know the specifics around the 01:16
13 dedicated signals afterwards to ? 01:13	13 header. 01:16
14 MR. ANSORGE: Objection. Foundation. 01:13	My understanding is that the absence of the 01:16
15 THE WITNESS: There was after those 01:13	15 header can be due to a variety of reasons, one of which 01:16
16 conversations, it was determined that there was no 01:13	16 can be incognito mode, but it can also the header can 01:16
17 reliable way to technically detect incognito in a 01:13	17 also be absent for a large number of other reasons. 01:16
18 definitive and reliable and accurate manner. And as a 01:13	18 Q. Right. 01:16
19 result, no further action was taken to build such a 01:13	But you would agree that at least in Chrome, 01:16
20 hypothetical signal. 01:14	20 all incognito traffic would not include the 01:16
21 BY MR. MAO:	21 X-Client-Data header generally. 01:16
22 Q. And that was within the confines of the 01:14	22 Isn't that correct? 01:17
23 existing architecture? Because you said that you didn't 01:14	23 MR. ANSORGE: Objection. Vague. Form and 01:17
24 then build any new dedicated signals, right, for 01:14	24 foundation. 01:17
25 incognito mode. 01:14	25 THE WITNESS: Again, I'm not a Chrome 01:17
Page 134	Page 136
1 And my question is can you build that? 01:14	1 engineer, so I do not know the exact conditions under 01:17
2 MR. ANSORGE: Objection. Vague. Foundation. 01:14	2 which the header may or may not be sent. 01:17
3 THE WITNESS: I'm not certain if we can build 01:14	3 My understanding is in general, incognito mode 01:17
4 that or not. 01:14	4 will not carry that header, but also a large number of 01:17
5 BY MR. MAO: 01:14	5 scenarios will also lead to the absence of the header. 01:17
6 Q. Why are you not certain? 01:14	6 BY MR. MAO:
7 A. Because of the technical constraints that I 01:14	7 Q. Right. 01:17
8 mentioned because of the lack of a reliable way of 01:14	8 But are you aware of situations where the 01:17
9 detecting incognito, I'm not sure if such a signal can 01:14	9 X-Client-Data header would be included in incognito 01:17
10 be built. 01:14	10 mode? 01:17
11 Q. So tell me a little bit about what was the 01:14	11 MR. ANSORGE: Objection 01:17
12 problem that you ran into when you were trying to detect 01:14	12 THE WITNESS: No. 01:17
13 in incognito mode? 01:14	MR. ANSORGE: vague. Form and foundation. 01:17
14 MR. ANSORGE: Objection. Vague. 01:14	14 BY MR. MAO: 01:17
THE WITNESS: I can't comment on the detailed 01:15	
	15 Q. So you say "No." 01:17
16 implementation of Chrome so I can only comment from an 01:15	16 Is the reason for so it sounds like what 01:17
17 ads perspective. 01:15	16 Is the reason for so it sounds like what 01:17 17 you're saying is that inaccuracy is one of 01:17
17 ads perspective. 01:15 18 We were not able to reliably detect incognito 01:15	16 Is the reason for so it sounds like what 01:17 17 you're saying is that inaccuracy is one of 01:17 18 over-inclusiveness; right? In other words, you're 01:17
17 ads perspective. 01:15 18 We were not able to reliably detect incognito 01:15 19 mode because there is no apparent differences or signals 01:15	16 Is the reason for so it sounds like what 01:17 17 you're saying is that inaccuracy is one of 01:17 18 over-inclusiveness; right? In other words, you're 01:17 19 saying the lack of the X-Client-Data header, even though 01:17
17 ads perspective. 01:15 18 We were not able to reliably detect incognito 01:15 19 mode because there is no apparent differences or signals 01:15 20 that are unique to the incognito mode as opposed to 01:15	16 Is the reason for so it sounds like what 01:17 17 you're saying is that inaccuracy is one of 01:17 18 over-inclusiveness; right? In other words, you're 01:17 19 saying the lack of the X-Client-Data header, even though 01:17 20 you're not aware of incognito mode ever carrying the 01:17
17 ads perspective. 01:15 18 We were not able to reliably detect incognito 01:15 19 mode because there is no apparent differences or signals 01:15 20 that are unique to the incognito mode as opposed to 01:15 21 non-incognito mode. 01:15	16 Is the reason for so it sounds like what 01:17 17 you're saying is that inaccuracy is one of 01:17 18 over-inclusiveness; right? In other words, you're 01:17 19 saying the lack of the X-Client-Data header, even though 01:17 20 you're not aware of incognito mode ever carrying the 01:17 21 X-Client-Data header, the lack of the X-Client-Data 01:17
17 ads perspective. 01:15 18 We were not able to reliably detect incognito 01:15 19 mode because there is no apparent differences or signals 01:15 20 that are unique to the incognito mode as opposed to 01:15 21 non-incognito mode. 01:15 22 For example, incognito mode blocks third-party 01:15	16 Is the reason for so it sounds like what 01:17 17 you're saying is that inaccuracy is one of 01:17 18 over-inclusiveness; right? In other words, you're 01:17 19 saying the lack of the X-Client-Data header, even though 01:17 20 you're not aware of incognito mode ever carrying the 01:17 21 X-Client-Data header, the lack of the X-Client-Data 01:17 22 header to you, as a non-Chrome engineer, at least is not 01:17
17 ads perspective. 01:15 18 We were not able to reliably detect incognito 01:15 19 mode because there is no apparent differences or signals 01:15 20 that are unique to the incognito mode as opposed to 01:15 21 non-incognito mode. 01:15 22 For example, incognito mode blocks third-party 01:15 23 cookies today but third-party cookies can also be absent 01:15	16 Is the reason for so it sounds like what 01:17 17 you're saying is that inaccuracy is one of 01:17 18 over-inclusiveness; right? In other words, you're 01:17 19 saying the lack of the X-Client-Data header, even though 01:17 20 you're not aware of incognito mode ever carrying the 01:17 21 X-Client-Data header, the lack of the X-Client-Data 01:17 22 header to you, as a non-Chrome engineer, at least is not 01:17 23 indicative of the incognito mode. 01:18
17 ads perspective. 01:15 18 We were not able to reliably detect incognito 01:15 19 mode because there is no apparent differences or signals 01:15 20 that are unique to the incognito mode as opposed to 01:15 21 non-incognito mode. 01:15 22 For example, incognito mode blocks third-party 01:15 23 cookies today but third-party cookies can also be absent 01:15 24 for a large number of other reasons that are not a 01:15	16 Is the reason for so it sounds like what 01:17 17 you're saying is that inaccuracy is one of 01:17 18 over-inclusiveness; right? In other words, you're 01:17 19 saying the lack of the X-Client-Data header, even though 01:17 20 you're not aware of incognito mode ever carrying the 01:17 21 X-Client-Data header, the lack of the X-Client-Data 01:17 22 header to you, as a non-Chrome engineer, at least is not 01:17 23 indicative of the incognito mode. 01:18 24 Did I say that correctly? 01:18
17 ads perspective. 01:15 18 We were not able to reliably detect incognito 01:15 19 mode because there is no apparent differences or signals 01:15 20 that are unique to the incognito mode as opposed to 01:15 21 non-incognito mode. 01:15 22 For example, incognito mode blocks third-party 01:15 23 cookies today but third-party cookies can also be absent 01:15	16 Is the reason for so it sounds like what 01:17 17 you're saying is that inaccuracy is one of 01:17 18 over-inclusiveness; right? In other words, you're 01:17 19 saying the lack of the X-Client-Data header, even though 01:17 20 you're not aware of incognito mode ever carrying the 01:17 21 X-Client-Data header, the lack of the X-Client-Data 01:17 22 header to you, as a non-Chrome engineer, at least is not 01:17 23 indicative of the incognito mode. 01:18

1 THE WITNESS: As far as I'm aware and I do 01:18	1 Do I understand your questions correctly? 01:20
2 not know the specific implementation of the Chrome 01:18	2 Q. Yes. We can answer it in that order. That's 01:20
3 header in question here. 01:18	3 perfectly fine. 01:20
4 But my general understanding is incognito mode 01:18	4 Let's start with the logs and then let's start 01:21
5 does not carry this header. I do not know if the 01:18	5 with ability in that role. 01:21
6 opposite is true or not. 01:18	6 A. As I stated before, we do not have a reliable 01:21
7 BY MR. MAO: 01:18	7 signal to infer incognito mode at this time we receive 01:21
8 Q. Got it. 01:18	8 an ad query. And as a result, we are also unable to 01:21
9 So are there not other ways that can be custom 01:18	9 infer incognito mode using the same set of signals from 01:21
10 built to signal to that, hey, this is incognito 01:18	10 the logs. 01:21
11 traffic? 01:18	11 Q. So you would have no way of looking at the 01:21
12 MR. ANSORGE: Objection. Form. 01:18	12 logs and knowing what is incognito mode traffic to be 01:21
THE WITNESS: As I stated earlier, there isn't 01:18	13 removed, if I needed to remove incognito traffic or not. 01:21
14 a reliable signal that we are aware of that can be used 01:18	14 Isn't that correct? 01:21
15 to infer incognito mode. And as a result, I cannot 01:19	15 A. To the best of my knowledge, there exists no 01:21
16 think of a way of building a mechanism to reliably 01:19	16 way to definitively know the incognito state of a given 01:21
17 detect incognito mode. 01:19	17 ad query. 01:21
18 BY MR. MAO: 01:19	18 Q. If the Court were in this case to order Google 01:21
19 Q. At least from the side; right? Or is your 01:19	19 to delete all log entries containing incognito traffic, 01:21
20 opinion also opining on whether or not Chrome can be 01:19	20 at least sitting from the perspective of the head of 01:22
21 built to convey that this is incognito mode? 01:19	21 product of is there a way in which you can see 01:22
22 A. I cannot speak for Chrome. 01:19	22 within your purview of how we go about doing that? 01:22
23 Q. Even though you're not a Chrome engineer, you 01:19	23 MR. ANSORGE: Objection. Form. Vague. And 01:22
24 would agree with me that surely Chrome can be built to 01:19	24 incomplete hypothetical. 01:22
25 signal that something is in incognito mode, wouldn't you 01:19	25 THE WITNESS: Because of the lack of reliable 01:22
Page 138	Page 140
1 agree? 01:19	1 signals to infer incognito mode, we will not be able to 01:22
T agree.	1 signals to line ineognito mode, we will not be able to 01.22
2 MR. ANSORGE: Objection. Form. Foundation. 01:19	2 definitively identify incognito traffic or log entries 01:22
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2 MR. ANSORGE: Objection. Form. Foundation. 01:19 3 THE WITNESS: I do not have the necessary 01:19 4 knowledge to assess that statement. 01:19	2 definitively identify incognito traffic or log entries 01:22 3 from this system. 01:22 4 BY MR. MAO: 01:22
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IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF CALIFORNIA OAKLAND DIVISION

CHASOM BROWN, MONIQUE TRUJILLO, WILLIAM BYATT, JEREMY DAVIS, and CHRISTOPHER CASTILLO, individually and on behalf of all similarly situated,

Plaintiffs,

v.

GOOGLE LLC,

Defendant.

Case No. 5:20-cv-03664-YTG-SVK

DEFENDANT'S OBJECTIONS AND RESPONSES TO PLAINTIFFS' INTERROGATORIES SET 9 (NOS. 34-40)

Pursuant to Federal Rule of Civil Procedure 33, Defendant Google LLC ("Google") hereby responds and objects to Plaintiffs' Interrogatories, Set 9 (Nos. 34-40). These objections and responses are made solely for the purpose of and in relation to this action. In addition, the objections and responses set forth in this document are based on Google's knowledge, investigations, and analysis to date. As discovery proceeds, Google may become aware of additional facts or evidence and its analysis of the case may change. Google reserves all rights to supplement and amend its objections and responses accordingly.

GENERAL OBJECTIONS

- 1. Google objects to Plaintiffs' Definitions, Instructions, and interrogatories to the extent they seek information and/or records that are not reasonably accessible and whose inclusion is not proportional to the needs of the case.
- 2. Google objects to the definition of "browser" as vague and ambiguous to the extent it draws a distinction between "web-based browsers" and "app browsers." All browsers are, by

Case No. 5:20-cv-03664-LHK

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definition, web-based and require software to be run on a device, whether that device is a desktop computer or a mobile device. Google will understand the term "browser" as referring to application software that contains a graphical user interface for displaying and navigating between web pages.

- 3. Google objects to the definition of "browsing data" as overly broad and unduly burdensome because it combines information pertaining to specific website visits (*e.g.*, "HTTP request," "hostname") with basic information about the browser (*e.g.*, "browser type," "language"). Google further objects to the definition of "browsing data" as vague and ambiguous due to the inclusion of "fingerprint' data (as described in paragraphs 100-104)." Paragraphs 100-104 of the Complaint describes "images, pixels, or fonts"—that is neither "fingerprint data" nor data Google uses to fingerprint users. Google further objects to the definition of "browsing data" as vague and ambiguous due to the inclusion of "geolocation data." Google will treat "geolocation data" as referring to precise latitude and longitude information that is collected from a mobile device.
- 4. Google objects to the interrogatories to the extent that they seek information shielded from disclosure by the attorney-client privilege, the work-product doctrine, the settlement privilege and/or any other applicable privilege or protection from discovery.
- 5. Google objects to Plaintiffs' Definitions, Instructions, and interrogatories to the extent they conflict with or encompass information and/or records falling outside the scope of discovery under the Federal Rules of Civil Procedure, the local rules of the Northern District of California, or any discovery orders governing this case.
- 6. Google's responses to these interrogatories are hereby made without waiving or intending to waive, but rather, to the contrary, by preserving and intending to preserve:
 - a. All questions as to the competence, relevance, proportionality, materiality, and admissibility as evidence for any purpose of the information or

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		documents, or the subject matter thereof, in any aspect of this action or any					
	other court action or judicial or administrative proceeding or investigation						
	b.	The right to object on any ground to the use of any such information or					
		documents, or the subject matter thereof, in any aspect of this action or any					
		other court action or judicial or administrative proceeding or investigation;					
	c.	The right to object at any time in connection with any further response to					
		these or any other interrogatories; and					
	d.	The right at any time to supplement its responses.					
	7. Google anticipates that future discovery, independent investigation, or analysis wi						
	supply additional facts and add meaning to known facts, as well as establish new factual conclusions						
	and legal contentions, all of which may lead to additions to, changes in, and variations from the						
	responses set forth	herein. Google reserves the right to modify, supplement, withdraw, or otherwise					
	alter its responses	to these interrogatories in accordance with the Federal Rules of Civil Procedure,					
	the local rules of the	ne Northern District of California, or any discovery orders governing this case.					
		RESPONSES TO INTERROGATORIES					
	INTERROGATO	RY NO. 34:					
	Please identify every log and data source that Google reviewed, analyzed, or searched as						
	part of Google's efforts to conduct a "log analysis of Chrome Incognito" in and around mid-2020.						
	See, e.g., GOOG-CABR-05280756.						
	RESPONSE TO INTERROGATORY NO. 34:						
١							

Google incorporates its General Objections as if set forth fully herein. Google further objects to this interrogatory as it mischaracterizes the cited document and an analysis performed by a small number of Google employees. Google further objects to the undefined phrase "every log and data source that Google reviewed, analyzed, or searched" as overly broad, unduly burdensome, vague, and ambiguous. For the purposes of this response, Google understands this phrase to refer to the Case No. 5:20-cv-03664-LHK

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log sources that Google used to perform the analysis described in GOOG-CABR-05280756. Google				
further objects to this interrogatory as unduly burdensome to the extent it purports to seek				
information regarding Google Search Search Ads because Plaintiffs have expressly limited their				
purported class to users "who accessed a non-Google website containing Google Analytics or Ad				
Manager." Dkt. 136-1 ¶ 192; see also June 2, 2021 Hearing Tr. 35:13-16 (discovery "is not carte				
blanche to all of Google's systems and it will continue to tie back to the proper definitions of				
the class"). Google further objects to this interrogatory to the extent it is tailored to seek information				
protected by the attorney-client privilege, the work product doctrine, or the common interest				
doctrine, or that is otherwise privileged or protected from discovery.				
Subject to and without waiving the foregoing objections, Google responds as follows:				
Google used in the analysis of Ad Manager browsing traffic				

INTERROGATORY NO. 35:

described in GOOG-CABR-05280756.

Aside from Google's mid-2020 "log analysis of Chrome Incognito" (e.g., GOOG-CABR-05280756), please describe in detail any other log-based analysis of Chrome Incognito that Google conducted, including the data sources involved and the results of any such analysis.

RESPONSE TO INTERROGATORY NO. 35:

Google incorporates its General Objections as if set forth fully herein. Google further objects to this interrogatory as it mischaracterizes the cited document and an analysis performed by a small number of Google employees for a specific purpose. Google further objects to this interrogatory as vague and ambiguous as to the phrase "any other log-based analysis of Chrome Incognito that Google conducted," which is neither self-evident nor defined. As written, this undefined phrase is unintelligible, overly broad, and unduly burdensome because it does not explain, *inter alia*, what constitutes "log-based analysis" or how any such analysis would need to relate to Incognito mode on the Chrome browser in order to be responsive to this request. For the purposes of this response,

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	CONFIDENTIAL – SUBJECT TO PROTECTIVE ORDER
1	Google understands this phrase to refer to other analyses employing the methodology for estimating
2	or inferring certain Incognito aggregate usage metrics described in GOOG-CABR-05280756, as
3	applied to Ad Manager. Google further objects to this interrogatory to the extent it is tailored to seek
4 5	information protected by the attorney-client privilege, the work product doctrine, or the common
6	interest doctrine, or that is otherwise privileged or protected from discovery.
7	Subject to and without waiving the foregoing objections, Google responds as follows:
8	Google has not identified information responsive to this interrogatory after conducting a
9	reasonable search.
10	INTERROGATORY NO. 36:
11	For the Class Period, please identify Incognito usage statistics for the USA, broken down by
12	(1) the number of unique chrome instances within the United States, (2) the number of unique
13 14	chrome instances within California that used Chrome Incognito, and (3) the number of unique
	change instances within the United States that year Change Incomite

e USA, broken down by the number of unique the number of unique chrome instances within the United States that used Chrome Incognito.

RESPONSE TO INTERROGATORY NO. 36:

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Google incorporates its General Objections as if set forth fully herein. Google objects to this request as vague and ambiguous as to the phrases "the number of unique chrome instances" and "Incognito usage statistics," which are neither self-evident nor defined. Google further objects that this interrogatory is overly broad and unduly burdensome because at least Subpart (1) of this interrogatory seeks information for users who are not included in Plaintiffs' class definition. Google further objects to this interrogatory as compound because it includes at least three sub-parts.

Subject to and without waiving the foregoing objections, Google responds as follows:

(1) Google maintains information in the ordinary course of business that can be used to show the number of unique Chrome instances that appear to be in the United States during a 28-day period ending on the first of the month from June 1, 2016 to January 1, 2022. Based on Google's investigation to date, that information is set forth below.

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1	<u>SERVICE LIST</u>
2	Brown v. Google LLC
3	Case No. 5:20-cv-03664-LHK-SVK
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6	Sean P. Rodriguez, CA Bar No. 262437
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- 1	DEFENDANT'S ORIECTIONS AND RESPONSES TO

PLAINTIFFS' INTERROGATORIES SET 9 (NOS. 34-40)

Case 4:20-cv-03664-YGR Documer	nt 595 Filed 06/01/22 Page 78 of 90				
CONFIDENTIAL – SU	JBJECT TO PROTECTIVE ORDER				
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Calhoun v. Google LLC Case No. 5:20-cv-5146-LHK-SVK Attorneys for Plaintiffs Patrick Calhoun					
et al.	BLEICHMAR FONTI & AULD LLP Lesley Weaver (Cal. Bar No. 191305) Angelica M. Ornelas (Cal. Bar No. 285929) Joshua D. Samra (Cal. Bar No. 313050) 555 12 th Street, Suite 1600 Oakland, CA 994607 Tel.: (415) 445-4003 Fax: (415) 445-4020 lweaver@bfalaw.com aornelas@bfalaw.com jsamra@bfalaw.com DICELLO LEVITT GUTZLER David A. Straite (admitted pro hac vice) One Grand Central Place 60 East 42 nd Street, Suite 2400 New York, NY 10165				

6- Case No. 5:20-cv-03664-LHK

Tel.: (646) 933-1000

Case 4:20-cv-03664-YGR Document 595 Filed 06/01/22 Page 79 of 90

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8	Eric Johnson (<i>pro hac vice</i> to be sought) 112 Madison Avenue, 7th Floor
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- 1	DEFENDANTS ODJECTIONS AND DESPONSES TO

Redacted Version of Document Sought to be Sealed From: owner-googleteam@lists.susmangodfrey.com on behalf of Mark C. Mao
To: Josef Ansorge; Ryan McGee x3030; Timothy Schmidt; Douglas Brush

Cc: QE Brown; GOOGLETEAM@lists.susmangodfrey.com

Subject: Re: Brown ((20-3664) Calhoun (20-5146) v. Google - Informal Meet and Confer Conferences this Wednesday - Confidential

Wednesday, February 23, 2022 8:17:34 PM

EXTERNAL Email

Date:

Mr. Ansorge. Thank you for confirming that you did not provide that field in the schema. Please produce updated schemas containing that field.

Get Outlook for iOS

From: Josef Ansorge < josefansorge@quinnemanuel.com>

Sent: Wednesday, February 23, 2022 5:06:21 PM

To: Mark C. Mao <mmao@BSFLLP.com>; Ryan McGee x3030 <rmcgee@forthepeople.com>; Timothy Schmidt <timothy.schmidt@accelconsulting.llc>; Douglas Brush <douglas.brush@accelconsulting.llc>

Cc: QE Brown <qebrown@quinnemanuel.com>; GOOGLETEAM@lists.susmangodfrey.com

<GOOGLETEAM@lists.susmangodfrey.com>

Subject: Re: Brown ((20-3664) Calhoun (20-5146) v. Google - Informal Meet and Confer Conferences this Wednesday - Confidential

Mr. Mao:

Our understanding is that the log source has a field named maybe_chrome_incognito_do_not_use_without_consulting_ads_identity_team. As we have explained before, lists the largest 100 fields in a given log. If the field maybe_chrome_incognito_do_not_use_without_consulting_ads_identity_team is not one of the largest 100 fields, then it won't be listed in .

Please let us know what time tomorrow afternoon you would like to meet and confer.

Best,

Josef Ansorge

Of Counsel,

Quinn Emanuel Urquhart & Sullivan, LLP

1300 I Street, NW, Suite 900 Washington, D.C. 20005 202-538-8267 Direct 202.538.8000 Main Office Number 202.538.8100 FAX josefansorge@quinnemanuel.com www.quinnemanuel.com

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From: Mark C. Mao <mmao@BSFLLP.com>

Sent: Wednesday, February 23, 2022 7:18:43 PM

To: Ryan McGee x3030 <rmcgee@forthepeople.com>; Timothy Schmidt

<timothy.schmidt@accelconsulting.llc>; Douglas Brush <douglas.brush@accelconsulting.llc>

Cc: QE Brown <qebrown@quinnemanuel.com>; GOOGLETEAM@lists.susmangodfrey.com

<GOOGLETEAM@lists.susmangodfrey.com>

Subject: RE: Brown ((20-3664) Calhoun (20-5146) v. Google - Informal Meet and Confer Conferences this

Wednesday - Confidential

[EXTERNAL EMAIL from mmao@bsfllp.com]

Mr. Ansorge: In addition to the question below, I am also open tomorrow and Friday to meet and confer with you as requested by the Special Master.

Special Master Brush and Mr. Schmidt – After Mr. Ansorge gives me a time to meet and confer, I will send out proposals for another meeting with you, prior to the next regular scheduled meeting. Thank you.

From: Mark C. Mao

Sent: Wednesday, February 23, 2022 2:01 PM

To: Ryan McGee x3030 <rmcgee@forthepeople.com>; Timothy Schmidt

<timothy.schmidt@accelconsulting.llc>; Douglas Brush <douglas.brush@accelconsulting.llc>

Cc: QE Brown <qebrown@quinnemanuel.com>; GOOGLETEAM@lists.susmangodfrey.com

Subject: RE: Brown ((20-3664) Calhoun (20-5146) v. Google - Informal Meet and Confer Conferences this

Wednesday - Confidential

Mr. Ansorge:

I looked at the looked at the looked at every field.

Which field from this schema would that bit be located? Please let us know that quickly.

Thank you in advance.

From: Ryan McGee x3030 < rmcgee@forthepeople.com>

Sent: Tuesday, February 22, 2022 5:11 PM

To: Timothy Schmidt <<u>timothy.schmidt@accelconsulting.llc</u>>; Douglas Brush

<douglas.brush@accelconsulting.llc>

Cc: QE Brown <<u>qebrown@quinnemanuel.com</u>>; <u>GOOGLETEAM@lists.susmangodfrey.com</u>; Mark C. Mao <<u>mmao@BSFLLP.com</u>>

Subject: RE: Brown ((20-3664) Calhoun (20-5146) v. Google - Informal Meet and Confer Conferences this Wednesday - Confidential

CAUTION: External email. Please do not respond to or click on links/attachments unless you recognize the sender.

Dear Special Master Brush, Mr. Schmidt, and Counsel:

The *Brown* Plaintiffs propose the following agenda for our session:

- 1. Field Descriptions and Schema
 - Plaintiffs want to know when they will receive the field descriptions that the Special Master ordered on December 15, 2021 (see attached email)
 - Plaintiffs also want to know when they can expect schemas for all logs that Bert Leung used for his Incognito analysis
- 2. Any Withheld Information
 - Has Google limited or withheld any production of fields from the data sources, including Search and detect-Incognito bits. If so, when, which, and why?
- 3. Incognito Detection Bit
 - Please identify all data sources that contain or contained the Incognito Detection bit.
- 4. Identifiers & Data Sources
 - Are there any identifiers that Plaintiffs have submitted that do not exist in the data sources requested to be searched with those identifiers?
- 5. Plaintiffs' Data
 - Googled stated it would search results to the Special Master for review; when can Plaintiffs expect that production?
- 6. Searching Historical Data (more than 8 days)
 - What has Google done to search for historical data?
- 7. Finishing Iterative Search 1

Thank you, Ryan

Ryan McGee

Attorney

My Bio

P: (813) 223-0931 **F:** (813) 222-4702

A: 201 N Franklin St, 7th Floor, Tampa, FL 33602

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A referral is the best compliment. If you know anyone that needs our help, please have them call our office 24/7.

From: Timothy Schmidt < timothy.schmidt@accelconsulting.llc>

Sent: Tuesday, February 22, 2022 3:51 PM

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Cc: Douglas Brush <douglas.brush@accelconsulting.llc>

Subject: *EXT* Brown ((20-3664) Calhoun (20-5146) v. Google - Informal Meet and Confer Conferences this Wednesday - Confidential

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All,

In light of our upcoming informal conferences tomorrow, Special Master Brush and I have discussed and continue to review your submissions.

If you have further (brief) submissions for Special Master Brush, he will be taking those only until 5:00 pm EST today to have adequate time to prepare for the sessions thoughtfully.

Please also work together (Plaintiffs and Google) in preparing agendas for the conferences. As before, Mr. Brush has asked that these agendas be joint submissions with bullet points and only the necessary technical language to support issues. These are due no later than 8:00 pm EST, today.

Thank you, Tim Schmidt

Timothy Schmidt

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